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SUB-COMMITTEE ON
RADIOCOMMUNICATIONS AND
SEARCH AND RESCUE
6th session
Agenda item 22

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REPORT TO THE MARITIME SAFETY COMMITTEE

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1 GENERAL

1.1 The Sub-Committee on Radiocommunications and Search and Rescue held its sixth session from 18 to 22 February 2002 at the Headquarters of the Organization under the Chairmanship of Mr. V. Bogdanov (Russian Federation), the Vice-Chairman, Mr. U. Hallberg (Sweden) was also present.

1.2 The session was attended by representatives from the following countries:

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|--|--------------------|
| ALGERIA | ITALY |
| ARGENTINA | JAPAN |
| AUSTRALIA | LATVIA |
| BAHAMAS | LIBERIA |
| BAHRAIN | LITHUANIA |
| BANGLADESH | MALAYSIA |
| BELGIUM | MALTA |
| BRAZIL | MEXICO |
| CANADA | NETHERLANDS |
| CHILE | NORWAY |
| CHINA | PANAMA |
| COLOMBIA | PERU |
| CROATIA | PHILIPPINES |
| CYPRUS | POLAND |
| DENMARK | PORTUGAL |
| DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA | REPUBLIC OF KOREA |
| ECUADOR | ROMANIA |
| EGYPT | RUSSIAN FEDERATION |
| ESTONIA | SAUDI ARABIA |
| FINLAND | SINGAPORE |
| FRANCE | SPAIN |
| GERMANY | SWEDEN |
| GREECE | SYRIA |
| ICELAND | TUNISIA |
| INDONESIA | TURKEY |
| IRAN (ISLAMIC REPUBLIC OF) | UKRAINE |
| IRELAND | UNITED KINGDOM |
| ISRAEL | UNITED STATES |
| | VENEZUELA |

and by the following Associate Member of IMO:

HONG KONG, China

1.3 The following United Nations specialized agencies and intergovernmental and non-governmental organizations were also represented:

INTERNATIONAL TELECOMMUNICATION UNION (ITU)
INTERNATIONAL LABOUR ORGANIZATION (ILO)
INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)
UNITED NATIONAL HIGH COMMISSION FOR REFUGEES (UNHCR)
WORLD HEALTH ORGANIZATION (WHO)
WORLD METEOROLOGICAL ORGANIZATION (WMO)

INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO)
INTERNATIONAL COMMITTEE OF THE RED CROSS (ICRC)
INTERNATIONAL MOBILE SATELLITE ORGANIZATION (IMSO)
COSPAS-SARSAT
INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL UNION OF MARINE INSURANCE (IUMI)
INTERNATIONAL CONFEDERATION OF FREE TRADE UNIONS (ICFTU)
INTERNATIONAL RADIO-MARITIME COMMITTEE (CIRM)
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)
OIL COMPANIES INTERNATIONAL MARINE FORUM (OCIMF)
INTERNATIONAL ASSOCIATION OF INSTITUTES OF NAVIGATION (IAIN)
INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATIONS (IFSMA)
INTERNATIONAL LIFEBOAT FEDERATION (ILF)
INTERNATIONAL SAILING FEDERATION (ISAF)
INTERNATIONAL COUNCIL OF CRUISE LINES (ICCL)
INTERNATIONAL ASSOCIATION OF DRY CARGO SHIPOWNERS
(INTERCARGO)
INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS
(INTERTANKO)
WORLD NUCLEAR TRANSPORT INSTITUTE (WNTI)

1.4 In welcoming the participants, the Secretary-General pointed out that 2001 was quite an eventful year in the history of the Organization with the 11 September terrorist attacks in the United States leading to a number of decisions and activities being initiated as IMO's response to strengthen maritime security. The process began with the unanimous adoption by the Assembly of resolution A.924(22) on Review of measures and procedures to prevent acts of terrorism which threaten the security of passengers and crews and the safety of ships. In that resolution the Assembly has requested the Maritime Safety Committee, the Legal Committee and the Facilitation Committee, under the direction of the Council, to undertake, on a high priority basis, a review to ascertain whether there is a need to update the relevant IMO instruments and, in the light of such a review, to take any action required in order to improve security aboard and ashore so as to reduce the risk to passengers, crews and port personnel on board ships and in port areas and to the vessels and their cargoes. So that action could be taken expeditiously, the MSC set up an intersessional Working Group on Maritime Security, which met from 11 to 15 February 2002 and prepared recommendations which, through MSC 75, are expected to be submitted to a Diplomatic Conference to take place in December of this year to adopt a set of proposed security measures in the form of amendments to the SOLAS and possibly the STCW Conventions. The intersessional group requested the Sub-Committee to consider some aspects concerning the long-range use of AIS systems on board ships and an alerting procedure in case of terrorist attacks and to advise MSC 75 accordingly.

The Secretary-General then referred to the adoption by the Assembly of resolution A.920(22) on Review of safety measures and procedures for the treatment of persons rescued at sea. He had proposed the resolution to deal with issues which came to the fore in the aftermath of recent incidents involving persons rescued at sea and/or asylum seekers, refugees and stowaways. In his view, those incidents had questioned the thoroughness of IMO's legislation and the degree of preparedness of the maritime community to satisfactorily deal with them. His main concern was that, unless the matter was considered in all its aspects and appropriate action was taken, there might be a negative impact on the integrity of the search and rescue system which the Organization had put in place globally to the benefit of those found in distress at sea. This was an issue of particular concern to the Sub-Committee, because of its role as IMO's specialist body dealing with search and rescue matters.

He then referred to Assembly resolution A.919(22) on the Acceptance and implementation of the International Convention on Maritime Search and Rescue, 1979, as amended, the draft of which had been prepared by MSC 74 with both the MSC and the Assembly noting with concern that, although twenty-two years had passed since the adoption of the SAR Convention, only 71 States had become party to it. Since A 22, the number had risen to 72, which nevertheless compared unfavourably with the number of States which have adopted other important safety-related IMO instruments, such as SOLAS, Load Lines, Collision Regulations, STCW, etc. He expressed the hope that those Governments, which had not yet accepted the SAR Convention, would respond to the appeal of the Assembly and would take steps to do so soon.

Turning to other important tasks before the Sub-Committee at this session, the Secretary-General mentioned the MSC's request for advice on whether there was a need for mandatory watchkeeping by GMDSS ships, when at sea, on VHF channel 16 after 1 February 2005, the date laid down in resolution MSC.77(69). He pointed out that, from many points of view, including that of the safety of non-SOLAS ships and associated regulatory aspects, it would not be easy to find an answer to the question, but he was confident that the Sub-Committee would be able to come up with a well-balanced solution. Other GMDSS issues, such as the revision of the International SafetyNET Manual; procedures for responding to DSC alerts by ships; bridge-to-bridge radiocommunications; development of criteria for general radiocommunications and the further development of GMDSS shore-based facilities and services were also to be considered. Another important task would be the preparation of IMO's position on maritime matters for submission, through MSC 75, to the ITU Conference Preparatory Meeting in November 2002 and subsequently to the World Radiocommunication Conference to be held in June/July 2003 in Venezuela.

He recalled that the MSC, at its seventy-third session, had resolved that, at various ITU fora, the status of the United Nations specialized agencies, such as ICAO, IMO and WMO, which deal with safety-related matters and the protection of human lives, should be differentiated from that of other international organizations and ITU sector members, a position which he had communicated to his counterparts at ITU and ICAO. The Secretary-General of ICAO had concurred with the IMO's position, however the Secretary-General of ITU had pointed out that, if IMO and ICAO believed that a different and more appropriate status should be considered for their participation in future ITU World Radiocommunication Conferences, clarifications of the provisions in the legal instruments of the Union should be sought at the forthcoming ITU Plenipotentiary Conference in 2002. The Sub-Committee should therefore prepare a draft IMO position on the status of observers from United Nations specialized agencies so that it could be submitted, through MSC 75, to the ITU Plenipotentiary Conference to be held in Marrakech, in September/October of this year.

The Secretary-General stressed that false distress alerts continued to be of serious concern and this time the Sub-Committee would consider the report of the *ad hoc* correspondence group and would also finalize the Guidelines for shore-based maintenance of satellite EPIRBs and ancillary devices and advise the MSC if further action needed to be taken by the Organization on both issues. Other important items for the Sub-Committee to consider included search and rescue, places of refuge, safety of large passenger ships and bulk carriers as well as the outcome of the eighth session of the Joint ICAO/IMO Working Group on Harmonization of Aeronautical and Maritime Search and Rescue and amendments to the IAMSAR Manual. MSC 74 had approved Guidelines for the preparation of plans for co-operation between search and rescue services and passenger ships and had instructed the Sub-Committee to develop, as a matter of urgency:

- .1 minimum requirements for SAR Data Providers and MRCCs to ensure the provision of a prompt, reliable and error-free 24-hour service; and

- .2 guidelines for ship operators and MRCCs on how to ensure that the data held by SAR Data Providers are up to date at all times.

As instructed by MSC 74, the Sub-Committee should review certain chapters of the fishing vessel Safety Code and Voluntary Guidelines and, if time permitted, should also revise the performance standards for NAVTEX equipment.

The Secretary-General, outlining that the Sub-Committee had a very heavy agenda and some complex issues to tackle, expressed confidence that it would succeed in making necessary technical and operational contributions to IMO's efforts to improve the safety of life at sea, maritime security and environmental protection.

Adoption of the agenda

1.5 The Sub-Committee adopted the agenda (COMSAR 6/1) which, together with a list of documents, considered under each agenda item is set out in annex 1. The Sub-Committee agreed, in general, to be guided in its work by the annotations to the provisional agenda contained in document COMSAR 6/1/1.

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted, in general, decisions and comments (COMSAR 6/2, COMSAR 6/2/1 and COMSAR 6/2/2) pertaining to its work made by NAV 47, the MSC Working Group on Maritime Security, MSC 74, the first extraordinary session of the Maritime Safety Committee and A 22 and took these into account in its deliberations when dealing with relevant agenda items.

2.2 The Sub-Committee noted, in particular, the instruction by MSC 72 (MSC 72/23, paragraph 15.16) to all Sub-Committees to apply the Human Element Analysing Process (HEAP) given in MSC/Circ.878/MEPC/Circ.346 as a matter of priority in their work and the request to provide information on experience gained during application of that process with a view to further improvements, which the Committee would take into account in its work, as appropriate.

3 GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

MATTERS RELATING TO THE GMDSS MASTER PLAN

3.1 The Sub-Committee noted that, in accordance with its instructions and using information provided by Governments after June 2000, the Secretariat had issued Corr.3 and Corr.4 to amend GMDSS/Circ.8 (Master Plan) in February and September 2001, respectively.

3.2 The Secretariat informed the Sub-Committee that since issuing GMDSS/Circ.8/Corr.4, it had received the updated information from Cyprus, Islamic Republic of Iran, Georgia, Latvia, Myanmar, Norway, Saudi Arabia, Turkey and Viet Nam mostly regarding installation of sea Area A1/A2 facilities. The Secretariat planned to issue GMDSS/Circ.8/Corr.5 in March 2002.

3.3 The delegation of Greece reiterated their concern expressed at COMSAR 5 regarding the absence of VHF DSC and MF DSC coverage in some areas of the Mediterranean Sea (see annexes 2 and 3 to GMDSS Master Plan – GMDSS/Circ.8/Corr.4) and invited Member States to implement the appropriate shore-based facilities in the region.

3.4 Noting the above information, the Sub-Committee requested Member States to check their national data in GMDSS/Circ.8/Corr.4, for accuracy, and provide the Secretariat with any necessary amendments, as soon as possible, and to respond to MSC/Circ.684, if they have not already done it.

OPERATIONAL AND TECHNICAL CO-ORDINATION PROVISIONS OF MARITIME SAFETY INFORMATION (MSI) SERVICES, INCLUDING REVIEW OF THE RELATED DOCUMENTS

3.5 The Sub-Committee noted that MSC 74 had approved COMSAR/Circ.28 on the International NAVTEX Service prepared by COMSAR 5 and had noted the Sub-Committee's decision to forward it to IHO.

Having noted that the NAVTEX and the International SafetyNET Manuals describing the structure, control and operation of the MSI services had been issued as IMO publications and were intended for use by seafarers, shipowners, maritime Administrations, service providers and others concerned with the preparation, broadcast and receiving of maritime safety information, the Committee agreed that, in the interest of operational safety, these Manuals should be made more readily available by being placed on the IMO web-site.

Being advised by the Secretariat that the Organization's policy was not to distribute IMO publications free of charge, the Committee recommended that appropriate facilities to download certain publications, including the above-mentioned Manuals, should be made available from the IMO web-site against payment.

3.6 The Sub-Committee also noted that MSC 74 had endorsed the Sub-Committee's action in issuing COMSAR/Circ.24 – List of NAVAREA Co-ordinators, to supersede COMSAR/Circ.20; and had approved the proposed amendments to the Joint IMO/IHO/WMO Manual on Maritime Safety Information (COMSAR/Circ.15), as given at annex 3 to document COMSAR 5/14, and had instructed the Secretariat to issue the amended Manual as an IMO publication.

3.7 The Sub-Committee was informed by the Secretariat that the Manual would be published in the first quarter of 2002.

Establishment of a Working Group

3.8 In order to consider documents submitted under this sub-item in detail, the Sub-Committee established the Operational Working Group (WG 3) under the Chairmanship of Mr. R. Swanson (United States) and instructed it to:

- .1 consider documents COMSAR 6/3 (Russian Federation); COMSAR 6/3/1 (Chairman, International SafetyNET Broadcast Co-ordinating Panel), COMSAR 6/3/2 (Russian Federation) and COMSAR 6/INF.4 (Chairman, International NAVTEX Co-ordinating Panel);
- .2 prepare a draft MSC circular on amendments to the International SafetyNET Manual; and
- .3 prepare any recommendations and/or proposals for improving MSI services,

for consideration at Plenary.

Report of the Operational Working Group (WG 3)

3.9 Having considered the report of the Working Group (COMSAR 6/WP.6), the Sub-Committee approved it, in general, and took action as summarized hereunder.

3.10 The Sub-Committee noted that, despite relatively minor changes to the infrastructure, the volume of information that each Administration disseminated through NAVTEX services worldwide on frequency 518 kHz had continued to increase. Several Administrations were actively taking measures to manage their data to avoid overrunning their timeslots; others had identified that they might need to take similar measures in the near future to reduce the volume of traffic transmitted on this frequency, without detriment to the safety of shipping. While the system continued to be a popular and well-used medium for the promulgation of Maritime Safety Information, in many areas it was becoming increasingly overloaded which in turn lead to instances of interference caused by overrunning timeslots. The principal causes of interference remained unchanged, and interference remained the highest priority issue for the NAVTEX Co-ordinating Panel.

3.11 The Sub-Committee further noted that consequent to the publication of COMSAR/Circ.28, there had been an increasing number of queries from Administrations regarding the possibility of setting up services on frequency 490 kHz. It was anticipated that infrastructure development in the near future would be concentrated primarily on these national services. To further reduce the possibility of interference, rather than allocate timeslots on an *ad hoc* basis as requests were received, the NAVTEX Co-ordinating Panel was currently developing a world-wide template for allocating B₁ characters for 490 kHz in order to ensure a significant time separation between transmissions from adjacent stations.

3.12 The Sub-Committee agreed that the recommendations listed in COMSAR 5/3/1 (Chairman, International NAVTEX Co-ordinating Panel) and COMSAR/Circ.28 were still valid. In addition, the Sub-Committee supported the Panel's recommendation that instances of interference should be reported to the Panel for investigation and should the Panel consider it necessary to change the timeslot/B₁ character of a particular station, this would only be implemented after all appropriate authorities had been consulted.

3.13 The Sub-Committee further noted that the United Kingdom (COMSAR 6/17) proposed a revision of the Performance standards for NAVTEX equipment which would allow more modern technology to be used to meet changing user requirements. This would enable received information to be sorted, stored and displayed in a more user-friendly manner and provide an opportunity to reduce operator workload and that the revision was strongly supported by the NAVTEX Co-ordinating Panel.

3.14 The Sub-Committee recognized the Panel's concern, expressed at COMSAR 5, regarding the quality and format of data transmitted, as some providers did not adhere to the guidance in the various regulatory and advisory documents, despite the recommendations in COMSAR 5/3/1. It was also noted that guidance might be required to ensure a consistent approach by all Administrations in the use of the world-wide web for the promulgation of Maritime Safety Information.

3.15 The Sub-Committee noted that the Russian Federation (COMSAR 6/3), as a result of their investigations/trials (see also paragraph 3.13 of COMSAR 5/14), had concluded that a need to establish two NAVAREAs/METAREAs northward of their Arctic coast did not exist any longer.

3.16 With regard to the proposal to redefine and extend the range of numerical values recognized as valid NAVAREA/METAREA identities from 00 to 99, the Sub-Committee noted that there were other reasons for extending the capabilities of Inmarsat-C services in this way and agreed to recommend to IMSO that the necessary software changes should be implemented as soon as possible.

3.17 The Sub-Committee instructed the Secretariat to liaise with IMSO for implementing the necessary software changes to redefine and extend the range of numerical values recognized as valid NAVAREA/METAREA identities from 00 to 99.

Amendments to the International SafetyNET Manual

3.18 The Russian Federation (COMSAR 6/3/2) stated that it could not support the proposal to delete Annex 6 from the current International SafetyNET Manual since it excluded the possibility to address navigational warnings and meteorological information to a temporary geographical area (rectangular or circular) and consequently constrained the potential of the SafetyNET service.

3.19 The Australian delegation stated that from an operational standpoint, at a minimum, the repetition codes and the cancel facility detailed in Annex 6 of the International SafetyNET Manual should be maintained and moved to Annex 4. Australia's SAR area was extremely large and, as a result, their RCCs used a variety of repetition codes depending on the situation at hand.

3.20 The Russian Federation reserved its position in relation to the deletion of Annex 6 of the International SafetyNET Manual and stated that it would need more time to review a draft MSC circular and the proposed amendments.

3.21 The Chairman of the International SafetyNET Co-ordinating Panel explained that Annex 6 was an extract from the Inmarsat-C SDM, which is now a proprietary document of Inmarsat Ltd, and was included in the Manual solely to advise manufacturers and LES operators of the messaging capabilities of the system. It was never intended to be a "shopping list" for the information providers to utilize in their broadcasts. The Chairman further noted that the IHO, WMO and IMO had used Annex 6 to develop the operational guidance in Annex 4, which is **mandatory**, for the broadcast of navigational warnings, meteorological information and search and rescue services respectively. Thus any substantive amendments to these mandatory guidelines must be approved by the appropriate organization before consideration by the Sub-Committee. It was further noted that Annex 6 should have been considered for deletion upon the subsequent approval and publication of Annex 4.

3.22 There was considerable discussion on the matter with several delegations expressing their support for the proposed amendments, whilst others were against it. Some delegations expressed the view that the amendments as drafted should be forwarded to the Committee for approval whilst others were of the opinion that more time was needed to carefully review the amendments from the substantive and editorial point of view and that the amendments be deferred to COMSAR 7.

3.23 Having carefully considered the views expressed on the issue and taking into account that the Russian Federation needed more time to review the proposed amendments, the Sub-Committee agreed to a draft MSC circular on Amendments to the International SafetyNET Manual, set out in annex 2, for submission to MSC 76 for approval. The Secretariat was instructed to act accordingly. The Committee was invited to endorse the above Sub-Committee's decision and action taken.

PROCEDURES FOR RESPONDING TO DSC ALERTS

3.24 The Sub-Committee recalled that, endorsing a proposal by COMSAR 4, MSC 72 had decided to include, in the Sub-Committee's work programme, a new high priority item on "Procedures for responding to DSC alerts", with 2 sessions needed to complete the work.

3.25 It was noted that MSC 74 had:

- .1 concurred with a proposal by COMSAR 5 and had included the item "Procedures for responding to DSC alerts" to the provisional agenda for COMSAR 6; and
- .2 endorsed the COMSAR 5's action in issuing COMSAR/Circ.25 on Procedure for responding to DSC distress alerts by ships, revoking COMSAR/Circs.2 and 21.

3.26 Noting that no submission had been received under this agenda item, the Sub-Committee referred the issue to the Operational Working Group and instructed it to:

- .1 consider the matter, if necessary in co-operation with the Technical Working Group; and
- .2 taking into account COMSAR/Circ.25, provide any comments and/or proposals.

Report of the Operational Working Group (WG 3)

3.27 Having considered the report of the Working Group (COMSAR 6/WP.6, section 3), the Sub-Committee noted the Group's view that COMSAR/Circ.25 on Procedures for responding to distress alerts by ships was still relevant as guidance to operators aboard ships.

3.28 The Sub-Committee agreed that Recommendation ITU-R M.541-8 on Operational procedures for the use of digital selective calling equipment in the Maritime Mobile Service was slightly out of alignment with COMSAR/Circ.25. The Secretariat was instructed to inform ITU WP 8B that changes to Recommendation ITU-R M.541-8 were needed to bring it into alignment with COMSAR/Circ.25.

FINAL REPORT OF THE 1ST NORTH SEA-NORTH ATLANTIC CO-ORDINATING CONFERENCE ON MARITIME RADIOCOMMUNICATIONS (NS-NA CC MR)

3.29 The Sub-Committee noted COMSAR 6/INF.2 (Canada) on the Final Report of the 1st North Sea-North Atlantic Co-ordinating Conference on Maritime Radiocommunication (NS-NA CCMR) and, in particular, noted certain deficiencies with NAVTEX services e.g. limited capacity etc., which could be taken into account in future revisions of the NAVTEX Manual.

4 DEVELOPMENT OF CRITERIA FOR GENERAL RADIOCOMMUNICATIONS

General

4.1 The Sub-Committee recalled that:

- .1 COMSAR 3 had noted that some Administrations indicated their intention to close their coast station facilities for public correspondence on VHF and MF. It had

briefly discussed the matter and was of the opinion that criteria for general radiocommunications in such well defined areas could, possibly, be developed;

- .2 MSC 69 had agreed to the proposal by COMSAR 3 to include, in the Sub-Committee's work programme, a low priority item on "Development of criteria for general radiocommunications", with 2 sessions needed to complete the item;
- .3 COMSAR 4 had considered contributions on aspects related to general radiocommunications (COMSAR 4/3 (Denmark), COMSAR 4/3/1 (France), COMSAR 4/3/15 (ICS) and COMSAR 4/5/1 (United States)). The Sub-Committee gave preliminary consideration to this topic and invited the MSC to include in the provisional agenda for COMSAR 5 the work programme item "Development of criteria for general radiocommunications" with a high priority and invited Members to submit their comments and proposals on these matters to COMSAR 5 for consideration; and
- .4 MSC 72 had changed the priority of the work programme item "Development of criteria for general radiocommunications" and included this item in the provisional agenda for COMSAR 5.

4.2 It was also recalled that COMSAR 5 had established the Technical Working Group and instructed it to consider and discuss document COMSAR 5/4/1 (France) providing an overview of general radiocommunications and proposing to modify a definition of "general radiocommunications"; and a joint submission by Denmark and Finland (COMSAR 5/4/2) providing some consideration on the issue and proposing to develop guidelines on allowing the use of alternative communication systems for general radiocommunications.

Having considered the report of the Technical Working Group (COMSAR 5/WP.5), the Sub-Committee noted that the Group had:

- .1 agreed that general radiocommunications means operational and public correspondence traffic and safety and safety-related communications as elaborated by ITU Radio Regulation Article S.33 not otherwise included in regulation SOLAS IV/2.1.5; and
- .2 recognized that, complying with the carriage requirements as defined in the SOLAS Convention, ship's installations fulfil the requirement for general radiocommunications facilities. If no facilities for general radiocommunications in the terrestrial GMDSS systems are established on shore in an A1 or A2 sea area, ships in these areas need additional equipment in order to fulfil the SOLAS functional requirements for general radiocommunications. If no additional equipment for general radiocommunications is to be added, the SOLAS Convention should be amended accordingly.

It was pointed out that general radiocommunications in A1 or A2 sea areas might be provided by systems and equipment other than the normal GMDSS equipment. If general radiocommunication systems other than those referred to in the SOLAS Convention are established, there might be no performance requirements for such systems.

It was also pointed out that development of criteria for general radiocommunications could provide valuable guidance for Administrations when accepting systems for public correspondence, but such criteria should not be mandatory.

COMSAR 5, noting that the group could not finalize the work on a definition of general radiocommunications and recognizing that this issue should be further considered at its next session, invited Member Governments to submit their proposals and comments to COMSAR 6 for further consideration

4.3 Having noted that no submissions had been received under the agenda item for this session, the Sub-Committee instructed the Operational Working Group to further consider the issue based on the previous submissions and, taking into account the above background information, to prepare any proposals and advise the Sub-Committee if further work on the matter was needed.

Report of the Operational Working Group (WG 3)

4.4 The Sub-Committee considered the report of the Working Group (COMSAR 6/WP.6) and took action as summarized hereunder.

4.5 The Sub-Committee agreed that criteria should be realistic in that it was unlikely that any such system would be developed specifically to meet an IMO criteria. Additionally, if such systems were available, they could be used as a model for criteria. In order not to preclude systems which might evolve and which could be used aboard ships to perform general radiocommunications, the Sub-Committee also agreed very general and straightforward criteria which should be able to be met by any commercial system serving ships.

4.6 The Sub-Committee agreed to a draft MSC circular on Guidelines for general radiocommunications, given at annex 3, for the guidance of Governments on criteria for general radiocommunications to meet GMDSS requirements in areas where no such general radiocommunications exist for submission to MSC 75 for approval.

4.7 The Committee was invited to approve the above-mentioned draft MSC circular and delete agenda item "Development of criteria for general radiocommunications" from the Sub-Committee's work programme as the work was completed.

REVISION OF RESOLUTION A.474(XII) ON PROPER USE OF VHF CHANNELS AT SEA

4.8 The Sub-Committee noted that MSC 74, having considered document MSC 74/9/3 (Netherlands) suggesting that resolution A.474(XII) on Proper use of VHF channels at sea should be reviewed by the Sub-Committee under its agenda item on "Development of criteria for general radiocommunications", in co-operation with the NAV and STW Sub-Committees, had instructed COMSAR 6 accordingly.

4.9 The Sub-Committee preliminary considered document COMSAR 6/4 (Netherlands) proposing to revise resolution A.474(XII) and referred it to the Operational Working Group, which was instructed to consider the issue in detail and advise the Sub-Committee accordingly.

Report of the Operational Working Group (WG 3)

4.10 Having considered the report of the Group (COMSAR 6/WP.6, section 5), the Sub-Committee agreed to the draft revised Assembly resolution on Proper use of VHF channels

at sea, given at annex 4, and invited the Committee to approve it, subject to comments/amendments which may be provided by the NAV and STW Sub-Committees, for submission to the twenty-third session of the Assembly for adoption. The Secretariat was instructed to inform NAV 48 and STW 34 accordingly.

5 ITU MARITIME RADIOCOMMUNICATION MATTERS

RADIOCOMMUNICATION ITU-R STUDY GROUP 8 MATTERS

5.1 The Sub-Committee briefly considered documents COMSAR 6/5/2 and COMSAR 6/INF.3 (Secretariat) containing a liaison statement from WP 8B concerning a draft significant review of Recommendation ITU-RM.493-10 on Digital selective calling system for use in the Maritime Mobile Service indicating that the purpose of this review was to improve the DSC system, provided that inter-operability with older equipment is achieved; and document COMSAR 6/5/4 (United States) proposing to incorporate GPS chip technology into all new DSC equipment with a view to improve the routing of DSC distress alerts by ensuring that an accurate positioning information is always included in the alerts.

Establishment of a Working Group

5.2 In order to consider the above proposals and comments in detail, the Sub-Committee established the Technical Working Group (WG 2) under the Chairmanship of Mr. E. Blikrud (Norway), with the following terms of references:

- .1 to consider documents COMSAR 6/5/2, COMSAR 6/5/4 and COMSAR 6/INF.3;
- .2 to exchange a view on "GPS/GNSS chip technology" with the SAR Working Group;
- .3 to prepare a draft liaison statement from IMO to WP 8B reflecting the Organization's position on a significant review of Recommendation ITU-R M.493-10; and
- .4 to provide appropriate comments and/or recommendations,

for consideration by Plenary.

Report of the Technical Working Group (WG 2)

5.3 Having considered the report of the Technical Working Group (COMSAR 6/WP.4), the Sub-Committee approved it in general and took action as indicated hereunder.

5.4 The Sub-Committee noted that the Working Group, in considering COMSAR 6/5/4 (United States) regarding integration of GNSS chip technology into DSC equipment, did not see any technical difficulties with integrating GNSS receivers into new DSC equipment.

5.5 The Sub-Committee also noted that the SAR Working Group had considered the proposal by the United States (COMSAR 6/5/4), commenting on the liaison statement from the ITU WP 8B to IMO, on the improvement of the routing of DSC distress alerts by ensuring accurate location information through the integration of GPS information by means of an integrated GPS chip and agreed that from the SAR perspective this was an attractive solution to include a position-fixing device and had the potential for easier direction of other ships to the

rescue location; minimizing the problem with false alerts; and effectively rescuing more lives at sea. The requirement should be considered for fitting in all new DSC equipment for use on board of all types of vessels and, if possible, should also enable the display of location information.

5.6 The Sub-Committee further noted that the integration:

- .1 might be unnecessary for ships already having a GNSS receiver which was or could be interconnected to the DSC equipment;
- .2 could provide position data different from that of the ships GNSS receiver used for navigation; and
- .3 might require installation of an external GNSS antenna and cable.

5.7 The Sub-Committee agreed the liaison statement to ITU WP 8B concerning revision of Recommendation ITU-R M.493-10, given at annex 5, and instructed the Secretariat to convey the liaison statement to the ITU-R WP 8B. The Committee was invited to endorse the action taken.

ITU WORLD RADIOCOMMUNICATION CONFERENCE MATTERS

General

5.8 The Sub-Committee noted that MSC 74 had recalled that MSC 73, being of the opinion that, within ITU, the status of the United Nations specialized agencies dealing with safety-related matters and protection of human lives (such as ICAO, IMO and WMO) should be distinguished from the status of other international organizations and Sector members (which are private companies), had invited the Secretary-General to communicate with the Secretary-Generals of ITU and ICAO on the matter of co-operation between United Nations specialized agencies for the purpose of protecting the safety-related services (such as maritime and aeronautical mobile and mobile-satellite services, including communications, positioning, COSPAS-SARSAT and other relevant issues).

In this regard, the Committee was advised by the Secretariat that:

- .1 the Secretary-General of ICAO had supported the IMO position on the above issue; while
- .2 the Secretary-General of ITU, in his response addressed to both ICAO and IMO, had pointed out that should the two Organizations still consider that a different and more appropriate status be considered for their participation in future ITU World Radiocommunication Conferences, some further clarifications of the provisions in the legal instruments of the Union might be necessary at the forthcoming ITU Plenipotentiary Conference in 2002.

Taking into account the information provided and comments made by various delegations, MSC 74 was of the opinion that the matter should be pursued further and, to this effect, instructed the Secretariat to study the legal implications involved in collaboration with ITU and to prepare a draft IMO position on the status of observers from United Nations specialized agencies, for consideration and endorsement by COMSAR 6; approval by MSC 75; and submission to ITU PPC-2002. The Committee further suggested that national telecommunication authorities should, as ITU Members, be invited to defend the IMO position by raising, individually or collectively, the issue at the forthcoming ITU Conference.

5.9 The Sub-Committee recalled that COMSAR 5 had established the correspondence group on preparation of an IMO position on WRC-03 matters with a view to progress the work intersessionally and report to COMSAR 6.

5.10 The Sub-Committee also noted that NAV 47 had invited COMSAR 6 to take into account its deliberations concerning the threat to the maritime radar spectrum issue (NAV 47/13, paragraphs 8.11 and 8.12) when preparing an IMO position to WRC-03.

5.11 With respect to the development of a draft IMO position on the status of observers from the United Nations specialized agencies, the Sub-Committee was informed that:

- .1 the Secretariat had contacted the ITU asking for advice on what kind of approach should be made by the Organization in light of the Committee's instruction;
- .2 in addition to the repeated official response by the ITU Secretary-General, it was pointed out that only Member States of ITU either individually or jointly can submit proposals to the PPC for clarifying the legal instruments. The Secretariat, being in contact with ICAO and some CEPT Members, has been informed that the matter was discussed at different regional ITU fora such as APT, CEPT, CITELE and PATU; and
- .3 after collecting the appropriate information in January 2002, the Secretariat had prepared document COMSAR 6/J/3 containing a preliminary draft IMO position on the status of observers and possible amendments to the ITU legal instruments. The Secretariat was not aware if such proposals had been approved and submitted to the PPC-2002.

5.12 The Sub-Committee noted document COMSAR 6/5/1 (United States) providing comments and proposals concerning an IMO participation as an observer in ITU WRCs, an IMO position on some WRC-03 agenda items and suggesting to develop a draft MSC resolution on Maritime safety and safety related communications; and documents COMSAR 6/5/3 and COMSAR 6/5/3/Add.1 by the Secretariat providing the report of the correspondence group on the development of an IMO position to WRC-03.

5.13 In order to consider the above proposals in detail, the Sub-Committee referred documents COMSAR 6/5/1, COMSAR 6/5/3, COMSAR 6/5/3/Add.1 and COMSAR 6/J/3 to the Technical Working Group for consideration and instructed it, taking into account comments made at Plenary, to:

- .1 prepare a draft IMO position on participation of IMO as an observer in the ITU WRCs;
- .2 prepare a draft IMO position to WRC-03, taking account of the outcome of NAV 47;
- .3 prepare, in co-operation with the Operational Working Group, a draft MSC resolution on Maritime safety and safety related communications; and
- .4 provide comments and/or recommendations, if any, regarding ITU WRC matters, for consideration in Plenary.

Report of the Technical Working Group

5.14 Having considered the report of the Technical Working Group (COMSAR 6/WP.4, paragraphs 4 to 8), the Sub-Committee took action as indicated hereunder.

5.15 Regarding the ITU World Radiocommunication Conference - 2003 matters the Sub-Committee prepared the draft IMO position concerning the relevant agenda items of WRC-03, as given in annex 6, for submission to MSC 75 for approval and consequent submission to the Conference Preparatory Meeting - 02 and WRC-03.

5.16 The Sub-Committee noted the views of the Working Group that there was a discrepancy in the SOLAS Convention and the Radio Regulations regarding definitions of different categories of radiocommunications and agreed a draft MSC resolution on Maritime safety and safety-related radiocommunications to bring the issue to the attention of IMO and ITU Members, as given in annex 7, for submission to MSC 75 for adoption.

5.17 The Sub-Committee also agreed to a draft IMO statement to the ITU Plenipotentiary Conference on participation of IMO as an observer in ITU World Radiocommunication Conferences including the draft circular letter inviting Maritime Administrations to support IMO views during ITU conferences, as given in annex 8, for submission to MSC 75 for approval.

PROPOSED DRAFT AMENDMENTS TO RESOLUTIONS A.804(19) AND A.806(19)

5.18 The Sub-Committee referred document COMSAR 6/5 (Russian Federation) suggesting to include a footnote into paragraph 1.3, Part B of Annexes to resolutions A.804(19) and A.806(19), which would bring the performance standards in conformity with the ITU Radio Regulations being in force, to the Technical Working Group for consideration and instructed it to:

- .1 provide technical expertise of the proposal;
- .2 consider if the footnote is applicable to paragraph 1.3 of Part C – Receivers, as well; and
- .3 recommend the date from which the footnote should be applicable.

5.19 Having considered the report of the Technical Working Group COMSAR 6/WP.4, paragraphs 13 to 14, the Sub-Committee, agreed that performance standards should be amended and instructed the Secretariat to insert the agreed relevant footnotes into Annexes to resolutions A.804(19) and A.806(19) published in the IMO publication "Performance standards for shipborne radiocommunications and navigational equipment" and invited the Committee to endorse the action taken.

6 SATELLITE SERVICES (INMARSAT AND COSPAS-SARSAT)

COSPAS-SARSAT SERVICES

6.1 The Sub-Committee noted that, in accordance with resolution A.886(21) – Procedure for the adoption of, and amendments to, performance standards and technical specifications, MSC 74 had adopted resolution MSC.120(74) on Adoption of amendments to the performance standards for float-free satellite emergency position-indicating radio beacons (EPIRBs) operating on 406 MHz (resolution A.810(19)), as prepared by COMSAR 5.

6.2 The Sub-Committee also noted document COMSAR 6/6/1 (COSPAS-SARSAT) providing a brief status report on the COSPAS-SARSAT system and highlighting recent developments including information concerning the 406 MHz management plan and the possible development of an international 406 MHz beacon registration database, to be used primarily when no national registration procedures and facilities had been implemented.

6.3 The Sub-Committee also noted document COMSAR 6/6/2 (COSPAS-SARSAT) providing information concerning existing discrepancies with respect to 406 MHz EPIRBs registries between the IMO Master Plan (Annex 12) and the COSPAS-SARSAT documents.

6.4 The Sub-Committee concurred with a proposal by COSPAS-SARSAT and invited Member Governments to:

- .1 review information provided at the annex to COMSAR 6/6/2;
- .2 co-ordinate at national level the relevant information on 24-hour points of contacts for 406 MHz EPIRBs registers and the appropriate administrative points of contact for beacon coding, registration and type approval; and
- .3 provide up-to-date information to both the IMO and the COSPAS-SARSAT Secretariats on 406 MHz EPIRB registries.

6.5 The Secretariats of MO and COSPAS-SARSAT were invited to constantly exchange the received information on 406 MHz EPIRB registries with a view to maintain up-dated and accurate databases.

6.6 The Sub-Committee also noted the COSPAS-SARSAT 20th anniversary of the first COSPAS-SARSAT System satellite launch (COSPAS-1, 30 June 1982) and first persons rescued by using COSPAS-SARSAT alert data (British Columbia, Canada, 10 September 1982).

INMARSAT SERVICES

6.7 The Sub-Committee considered document COMSAR 6/6/3 (IMSO) providing analysis and assessment of the performance by Inmarsat Ltd of the company's obligations for the provision of maritime services within the GMDSS, as overseen by IMSO. The information covered the period from 1 January 2000 to 31 October 2001. It was assessed, that during this period, Inmarsat Ltd had continued to provide a sufficient quality of service to meet its obligations under the GMDSS.

All distress alerts and calls through the Inmarsat system during the above-mentioned period were handled correctly and delivered promptly. Inmarsat Ltd has now completed development of an automated distress alert monitoring capability – the Distress Alert Quality Control System (DAQCS) - that provides quantitative data on the number of distress priority calls, alerts and messages.

Inmarsat Ltd's maritime business remains by far the largest single contributor to the company's revenues, having risen to 68.5% of total revenue during the nine months to September 2001. This was clearly recognised by the company and reflected in the amount of effort given to the promotion and development of the maritime sector. At the same time, Inmarsat Ltd continues to provide maritime distress and safety services for the GMDSS at either no cost or a special rate.

In view of the foregoing review of the status and performance of the relevant Inmarsat systems, it was IMSO's overall assessment that, during the period covered by this report, Inmarsat Ltd has continued to provide fully operational maritime mobile-satellite distress and safety communication services for the GMDSS and fulfil the company's public service obligations as stated in paragraph 2.1.2 of the PSA.

In the light of present security concerns, it is also important to note that Inmarsat Ltd maintains full redundancy of all the critical parts of its constellation and network. Thus every precaution has been taken to ensure that the integrity of GMDSS services is most unlikely to be affected by a single terrorist incident.

New terminal equipment

6.8 The Sub-Committee initially consider section 5 of COMSAR 6/6/3 and COMSAR 6/INF.5 (IMSO) describing new Inmarsat terminal equipment and instructed the Drafting Group of Plenary to review resolution A.808(19) – Performance standards for ship earth stations capable of two-way communications in line with resolution A.888(21) – Criteria for the provision of mobile-satellite communication systems in the Global Maritime Distress and Safety System (GMDSS) and the introduction of the new Inmarsat Fleet F77 satellite communication terminal, taking account of comments made by IMSO.

Report of the Drafting Group

6.9 Having considered the report of the Drafting Group (COMSAR 6/WP.7), the Sub-Committee took action as appropriate.

6.10 In respect of the Inmarsat Fleet F77 satellite communication terminal, the Sub-Committee noted that operative paragraph 6 of resolution A.808(19) requested “the Maritime Safety Committee to keep these Performance Standards under review and to adopt amendments thereto, as necessary”. The Sub-Committee agreed that some amendments would be necessary to cover the introduction of the new Inmarsat Fleet F77 ship earth station.

6.11 The Sub-Committee noted that, in reviewing the text of resolution A.808(19), the Drafting Group had also reviewed SOLAS chapter IV regulation 10/1.1 and concluded that no change was necessary to this regulation.

6.12 The Sub-Committee then reviewed the Inmarsat Fleet F77 terminal equipment in relation to resolution A.888(21) provisions and concluded that resolution A.888(21) indeed applied to new Inmarsat systems or standards and F77 should therefore meet the relevant requirements of resolution A.888(21). The Sub-Committee conducted a detailed comparison of the performance of F77 against resolution A.888(21) and concluded that F 77 met the relevant requirements of that resolution.

6.13 Bearing in mind that resolution A.888(21) opens up the prospect that other satellite systems might be accepted for providing GMDSS services in the future, the Sub-Committee agreed to prepare a draft MSC resolution to cover ship earth stations operating in the Inmarsat system only. The Sub-Committee envisaged that further resolutions would be necessary to cover any other systems or services that might be approved for the GMDSS in the future.

6.14 Additionally, the Sub-Committee took note of information provided by the IMSO's observer that the Inmarsat design and installation guidelines (DIGs) for all ship earth station

types were in course of revision. The revised DIGs will be submitted by IMSO to COMSAR 7 for information.

6.15 The Sub-Committee agreed the draft MSC resolution on Performance standards for Inmarsat ship earth stations capable of two-way communications given at annex 9, and invited the Committee to adopt it. No consequential amendment was considered necessary to resolution A.888(21).

6.16 Taking into account the above deliberations and action taken, the Sub-Committee agreed that Inmarsat Fleet F77 terminals should be used on GMDSS ships and by MRCCs and invited the Committee to concur with the Sub-Committee's view.

6.17 With regard to the proposed draft MSC resolution, the Sub-Committee considered the references in resolution A.808(19) to direct-printing, noting that the Drafting Group had consulted some delegations and had reviewed ITU Operational Bulletin No. 717 dated 1 June 2000, which includes a report to ITU-T Study Group 2 on the declining use of the international telex service. As a result, the Sub-Committee was of the view that the use of the term "direct-printing" no longer serves the best interests of the Organization in resolution A.808(19) and decided to use the term "data communications" instead in the draft MSC resolution. For the avoidance of doubt, the Sub-Committee agreed that data communications also includes direct-printing and telex.

7 EMERGENCY RADIOCOMMUNICATIONS: FALSE ALERTS AND INTERFERENCE

General

7.1 The Sub-Committee recalled that MSC 70 had approved MSC/Circ.882 on Guidelines on annual testing of 406 MHz satellite EPIRBs and, noting that the Sub-Committee was of the opinion that similar guidelines should also be prepared for L-band satellite EPIRBs at its next session, had instructed COMSAR 4 to consider this matter under its agenda item on "Emergency radiocommunications: false alerts and interference". COMSAR 4 was informed by CIRM that they were in the process of developing a proposal for guidelines and would submit their proposal to COMSAR 5.

7.2 It was also recalled that COMSAR 5 had noted a preliminary draft COMSAR circular on Guidelines for establishing shore-based maintenance of satellite EPIRBs, given at annex 5 to COMSAR 5/WP.3, and had invited Member Governments to submit their comments and proposals on the matter to COMSAR 6 for further consideration.

7.3 The Sub-Committee further recalled that a new regulation IV/15.9:

"Regulation 15 – Maintenance requirements

9 Satellite EPIRBs shall be tested at intervals not exceeding 12 months for all aspects of operational efficiency with particular emphasis on frequency stability, signal strength and coding. However, in cases where it appears proper and reasonable, the Administration may extend this period to 17 months. The test may be conducted on board the ship or at an approved testing or servicing station.",

is due to come into force on 1 July 2002.

7.4 The Sub-Committee noted that, MSC 74 noting the establishment, by COMSAR 5, of a correspondence group to consider the development of a false distress alerts monitoring and reporting system and report to COMSAR 6, had decided to extend the target completion date of the Sub-Committee's work programme item on "Emergency radiocommunications: false alerts and interference" to 2002.

ON-BOARD INSPECTION AND SHORE-BASED MAINTENANCE OF SATELLITE EPIRBs

7.5 After initial consideration of documents submitted under this agenda item and concerning on-board inspection and shore-based maintenance of satellite EPIRBs, the Sub-Committee referred COMSAR 6/6 (France and COSPAS-SARSAT), COMSAR 6/7/1 (Finland) and COMSAR 6/7/3 (Norway) to the Technical Working Group (WG 2) for consideration and instructed it to prepare a draft MSC circular – Guidelines for on-board inspection and shore-based maintenance of satellite EPIRBs and ancillary devices revoking MSC/Circ.882.

Report of the Technical Working Group (WG 2)

7.6 Having considered the report of the Working Group (COMSAR 6/WP.4/Add.1), the Sub-Committee took action as indicated hereunder.

7.7 The Sub-Committee agreed a draft MSC circular on Guidelines for shore-based maintenance of satellite EPIRBs, given in annex 10, and a draft MSC circular on Guidelines on annual testing of 406 MHz satellite EPIRBs, given in annex 11, and submitted them to MSC 75 for approval.

7.8 Noting the Working Group opinion that the SOLAS regulation IV/15.9 was technically difficult to implement on board a ship with respect to testing of frequency stability and signal strength, the Sub-Committee agreed that the issue should be considered further and invited the Committee to extend the target completion date for the agenda item "Emergency radiocommunications: false alerts and interference" to 2003.

7.9 Members were invited to submit their proposals on the issue to COMSAR 7 for consideration, subject to the authorization of the Committee.

FALSE ALERTS AND INTERFERENCE

7.10 The Sub-Committee referred documents COMSAR 6/7/2 (United States), COMSAR 6/7/4, COMSAR 6/7/4/Add.1 and COMSAR 6/7/4/Add.2 by Norway to the Operational Working Group for detailed consideration and instructed it, taking into account comments and proposals made in Plenary, to prepare:

- .1 a draft standardized questionnaire to be used by MRCCs on collecting relevant data from ships which have sent unintended distress alerts;
- .2 a draft standardized formats for reporting false alerts; and
- .3 relevant comments and proposals.

Report of the Operational Working Group (WG 3)

7.11 Having considered the report of the Working Group (COMSAR 6/WP.6, section 7), took action as summarized below.

7.12 The Sub-Committee noted the Working Group's conclusion that the procedure and philosophy outlined in paragraph 4.2.2 of the Correspondence Group's report (COMSAR 6/7/4), namely where Administrations collect and report false alerts to GMDSS-SMR according to procedures related to the different alerting systems, i.e. Inmarsat alerts being reported from Administrations to the Inmarsat; and 406 MHz EPIRB alerts to the COSPAS-SARSAT which then collects and reports to IMO, while DSC alerts are analysed by Administrations and reported directly to IMO, was the preferred option.

7.13 The Sub-Committee also noted the opinion of the Working Group that there was a need for a GMDSS-SMR body, which summarizes and distributes lessons learned from the analyses. The question was: should this be a task for IMO?

7.14 The Sub-Committee also noted the information by the IMSO's observer that Inmarsat Ltd was already running a GMDSS-SMR programme related to Inmarsat Ltd alerts and willing to share some information with associated (M)RCCs. Unlike all MRCCs, Inmarsat Ltd kept information about all alerts handled by the Inmarsat systems, and might share certain reports of interest for (M)RCCs or Maritime Administrations. Information from (M)RCCs to Inmarsat Ltd may also be used to compare own data to ensure the highest quality of Inmarsat distress services.

7.15 The Sub-Committee further noted that COSPAS-SARSAT was running a false alerts monitoring in accordance with COSPAS-SARSAT document C/S A.003 ("COSPAS-SARSAT System Monitoring and Reporting") and publishing annually false alerts statistics in the System Status and Operations Report; and invited COSPAS-SARSAT to provide detailed statistics on false alerts, as available, in its regular status report to COMSAR 7.

7.16 The Sub-Committee also noted that the Correspondence Group was in the process of developing guidelines to Administrations on this matter and accordingly agreed to extend the work of the Correspondence Group on false alerts to 2003 to enable it to finalise its work, subject to MSC 75 decision (see paragraph 7.8).

7.17 After some discussion, the Sub-Committee also agreed to modify the original terms of reference of the Correspondence Group on false alerts which was instructed to:

- .1 prepare draft guidelines to Administrations;
- .2 prepare procedure on how to collect data on false alerts;
- .3 consider how to report collected information to SMR;
- .4 prepare a procedure for Administrations on how to derive lessons learned from the data collected;
- .5 consider document COMSAR 6/7/2; and
- .6 report to COMSAR 7.

7.18 The Sub-Committee further concluded that the standardized questionnaire and formats for reporting false alerts, as given in COMSAR 6/7/4/Add.1 and COMSAR 6/7/4/Add.2 were acceptable as proposed and agreed that they be issued as a guidance for (voluntary) use. Accordingly, it instructed the Secretariat to prepare a draft COMSAR circular encouraging Administrations to use these forms in collecting data on false alerts for approval by the Committee.

7.19 The Sub-Committee was also of the opinion that a small number of MRCCs should participate in a trial on the use of the standardized questionnaires and formats to report false alerts; and invited Administrations to contribute on the matter, concerning GMDSS-SMR, in particular, by providing information and analysis to appropriate organizations.

7.20 The Sub-Committee further agreed that the present Chairman of the Correspondence Group, Mr. Bjorn Magnussen should continue as Chairman for the work being carried out. Administrations were requested to notify Mr. Bjorn Magnussen* (Norway) preferably by e-mail if interested to participate in the Correspondence Group.

7.21 The Sub-Committee noted information provided by COSPAS-SARSAT in COMSAR 6/7 summarising data on 406 MHz interference sources detected by COSPAS-SARSAT participants during the year 2000. For reference, additional data was provided for the period from 1996 to 1999. The Sub-Committee also noted the significant decrease of the number of interference sources observed in year 2000 that seemed to indicate a noticeable improvement of the interference situation. A number of interference problems were successfully resolved through co-operation with the respective Administrations as demonstrated by the 2000 figures. The continuation of interference in many regions and the new sources detected, clearly showed that the interference monitoring programme should be continued.

7.22 The Sub-Committee invited Administrations to take note of COMSAR 6/7 and take action to assist with the reduction of sources of interference in the frequency band of 406.0 – 406.1 MHz.

Refresher courses for GOC and ROC

7.23 The Sub-Committee noted COMSAR 6/INF.12 (Norway) informing that the Norwegian Administration was considering a mandatory examination, with or without a refresher course, when GOC or ROC should be renewed or endorsed after 5 years. Several delegations wanted the matter to be considered by the Operational Working Group. This was not accepted because the submission was an INF. document.

7.24 In connection with the above information the Sub-Committee was informed that, noting the options available to Administrations under STCW regulation I/11, STW 33 had agreed that an amendment to the STCW Code to make examinations mandatory for renewal or endorsement of GMDSS certificates every 5 years was unnecessary. (STW 33/17, paragraph 5.17).

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8 MATTERS CONCERNING SEARCH AND RESCUE, INCLUDING THOSE RELATED TO THE 1979 SAR CONFERENCE AND THE INTRODUCTION OF THE GMDSS

HARMONIZATION OF AERONAUTICAL AND MARITIME SEARCH AND RESCUE PROCEDURES, INCLUDING SAR TRAINING MATTERS

General

8.1 The Sub-Committee noted that MSC 74 had approved the draft amendments to SOLAS regulation V/21, proposed by COMSAR 5, concerning the mandatory carriage of Volume III of the IAMSAR Manual on board ships and had requested the Secretary-General to circulate them in accordance with SOLAS article VIII, for consideration with a view to adoption at MSC 75.

In this regard, the Committee noted that a proposal of ISAF on the development of an appropriate user-friendly extract of Volume III of the IAMSAR Manual for use by non-Convention ships would be referred to the *ad hoc* Joint IMO/ICAO Working Group for consideration.

8.2 The Sub-Committee also noted that, as approved by MSC 74, the eighth meeting of the ICAO/IMO Joint Working Group on Harmonization of Aeronautical and Maritime Search and Rescue was held in Montreal (Canada), from 20 to 24 August 2001.

8.3 It was further noted that, as requested by COMSAR 5, MSC 74 had extended the target completion date for the work programme agenda item "Harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters" to 2002.

8.4 The Sub-Committee briefly considered documents COMSAR 6/8 and COMSAR 6/8/Add.1 (Secretariat) reporting on the outcome of the eighth meeting of the ICAO/IMO Joint Working Group; and COMSAR 6/8/3 (Secretariat) stressing the need for updating model training courses on maritime search and rescue.

Establishment of a Working Group

8.5 In order to consider the above proposals and comments in detail, the Sub-Committee established the SAR Working Group (WG 1) under the Chairmanship of Mr. U. Hallberg (Sweden), Vice-Chairman of the Sub-Committee, with the following terms of references:

- .1 to consider status of development of a GMDSS Coast Station Operator's Course (CSOC);
- .2 to review terms of reference for the ICAO/IMO JWG and justification for its next meeting; and
- .3 to prepare any recommendations or proposals for harmonization of aeronautical and maritime SAR procedures,

for consideration at Plenary.

Report of the Working Group

8.6 Having received the report of the SAR Working Group (COMSAR 6/WP.9), the Sub-Committee approved it in general and took action as indicated hereunder.

Joint ICAO/IMO Working Group report

8.7 The Sub-Committee considered the report of the eighth meeting of the ICAO/IMO Joint Group on Harmonization of Aeronautical and Maritime Search and Rescue (JWG 8) held in Montreal, Canada from 20 to 24 August 2001 (COMSAR 6/8 and COMSAR 6/8/Add.1).

8.8 The Sub-Committee noted, in particular, recommendations 8/2, 8/3, 8/6, 8/15, 8/17, 8/19 and 8/21 of the JWG 8 report, as set out in COMSAR 6/WP.9, paragraph 5.

8.9 The delegation of the United Kingdom offered to submit a draft GMDSS Coast Station Operator's Course (CSOC) to COMSAR 7 for consideration.

8.10 The Sub-Committee endorsed the continuation, terms of reference and membership of the Joint ICAO/IMO Working Group for the next session, planned to be held in Hong Kong, China from 30 September to 4 October 2002 and invited the Committee to approve the convening of the ninth session of the Joint ICAO/IMO Working Group.

8.11 The Sub-Committee noted the questions raised by the delegation of Cyprus, supported by the delegation of the Bahamas, on the rotation of the permanent membership of the Joint Working Group and the meeting venues, which should include e.g. on an alternate basis, the Organization's Headquarters, giving the permanent missions, located in London, the possibility to participate as observers at no additional cost to these delegations. Recalling the discussion and decision of MSC 72 (MSC 72/23, paragraph 9.20) on the same issue, the Sub-Committee invited JWG 9 to consider the matter and report thereon to COMSAR 7.

8.12 The Sub-Committee returned to the recommendations relating to amendments to the IAMSAR Manual under the consideration of agenda item 15.

SAR Model courses

8.13 The Sub-Committee, in considering document COMSAR 6/8/3 (Secretariat) on the need for a review of the IMO Maritime SAR Model courses, noted the various national courses conducted by Member Governments, and invited them to submit the principles on which they base their courses to JWG 9 for consideration and submission of the outcome thereof to COMSAR 7 for appropriate action. The information should if possible include:

- .1 learning subjects;
- .2 time allocated to each subject;
- .3 entry qualifications;
- .4 type of students;
- .5 theoretical and practical studies; and
- .6 issuing of certificates of competence.

PLAN FOR THE PROVISION OF MARITIME SAR SERVICES, INCLUDING PROCEDURES FOR ROUTEING DISTRESS INFORMATION IN THE GMDSS

General

8.14 It was noted that MSC 74 had endorsed the action by COMSAR 5 in combining SAR.2 and SAR.3 circular data and in issuing COMSAR/Circ.27 on Data format for the new combined SAR.2 and SAR.3 circulars concerning information on the current availability of SAR services

and including it on the IMO web site in English, French and Spanish. Up to the present date certain responses have been received and incorporated into the IMO database.

8.15 In this context the Sub-Committee noted information provided by the Secretariat on the progress made in the follow-up to the 2000 Florence SAR/GMDSS Conference, the imminent signing of a multilateral SAR agreement on the establishment of the sub-regional MRCC in Mombassa, by Kenya, the Seychelles and Tanzania and the preparation for an assessment mission to these three countries to evaluate the situation.

SAR data providers

8.16 The Sub-Committee recalled that, in reviewing MSC/Circ.864, COMSAR 5 had agreed on the SAR Data Provider (SDP) concept, namely who will hold the SAR co-operation plan information on behalf of the ship/operator and the MRCCs and provide the data in a two-way system to both parties on request. In order to identify the SDP for a particular passenger ship, it was necessary to maintain an index, accessible to all parties; and the United Kingdom had offered to set up and maintain such an index.

8.17 It was noted that, in considering document MSC 74/9/2 (United Kingdom), MSC 74 had agreed to:

- .1 amend the draft Guidelines referred to above by including additional paragraphs concerning the index and the necessary contact information for the index;
- .2 invite Member Governments to submit index entries as indicated in the proposed additional paragraphs and to ensure that they are kept up-to-date; and
- .3 invite users with access to the Internet to visit web-site www.mcga.gov.uk/sarcp.

8.18 The Committee approved MSC/Circ.1000 on Guidelines for the preparation of plans for co-operation between search and rescue services and passenger ships (in accordance with SOLAS regulation V/7.3), as modified, revoking MSC/Circ.864.

8.19 MSC 74, concurring with a proposal by the delegation of Cyprus, instructed COMSAR 6 to develop, as a matter of urgency:

- .1 minimum requirements for SDPs for holding information on the SAR co-operation plan on behalf of the ship/operator and the MRCCs to ensure the provision of a prompt, reliable and error-free 24-hour service; and
- .2 guidelines for ship operators and MRCCs on how to ensure that the data held by the SDPs is up to date at all times.

8.20 MSC 74 noted that COMSAR 5 had requested that the Working Group on Large Passenger Ships Safety:

- .1 be informed that the Joint ICAO/IMO Working Group on Harmonization of Aeronautical and Maritime SAR was considering mass rescue operation (MRO) matters; and
- .2 be advised that the Sub-Committee was seeking approval of an MSC circular on Guidelines for the preparation of plans for co-operation between search and rescue

services and passenger ships; and be requested to provide guidance with regard to reporting the arrival and stay of ships in SAR regions.

8.21 In considering the matters referred to the working group by COMSAR 5, MSC 74 had noted the group's view that guidance with regard to reporting the arrival and stay of ships in SAR regions should be contained in the Guidelines for the preparation of plans for co-operation between search and rescue services and passenger ships (MSC/Circ.1000) and instructed COMSAR 6 to further consider this matter and advise MSC 75 accordingly.

SAR.7 circular

8.22 The Sub-Committee recalled that, having been informed by the Secretariat on the development, by the Organization, of a new web site, COMSAR 5 had agreed that key documents/circulars, based on the list set out in SAR.7/Circ., should be included into the new IMO web-site to enhance availability of information and had instructed the Secretariat to keep the information updated between sessions of the Sub-Committee.

8.23 The Sub-Committee noted that, as instructed, the Secretariat had issued SAR.7/Circ.3 – List of IMO documents and publications, which should be held by a maritime rescue co-ordination centre (MRCC), which is available in English, French and Spanish on the IMO web-site.

Acceptance and implementation of the International Convention on Maritime Search and Rescue, 1979, as amended

8.24 The Sub-Committee also noted that MSC 74 had prepared and approved the draft Assembly resolution on Acceptance and implementation of the International Convention on Maritime Search and Rescue, 1979, as amended, for submission to the twenty-second session of the Assembly for adoption.

The Assembly, noting the reservations registered by Cyprus, Tunisia and Turkey at MSC 74, adopted resolution A.919(22) on Acceptance and implementation of the International Convention on Maritime Search and Rescue, 1979, as amended. The Assembly also took note of the statement by Greece at MSC 74, which was reiterated at Committee 2, that the resolution should be regarded as a preliminary step, in anticipation of future accessions to the SAR Convention of States, which have not acceded to it yet and not as an alternative or supplement to that Convention. Some delegations expressed similar views and pointed out that the resolution could encourage countries to ratify the Convention.

The delegation of Cyprus, recalling its position at MSC 74 on this resolution, stated that, whilst not opposing the approval of the resolution, it had some misgivings on operative paragraphs 2(b) and 2(e) and would consider informing the Secretary-General of reservations, if any, in due course after the resolution had been adopted.

8.25 The Sub-Committee briefly considered documents COMSAR 6/8/1 (Canada) and COMSAR 6/8/8 (Norway) concerning a possible impact on GMDSS distress alerting due to the discontinuance of the telex and the termination of ARQ telex; COMSAR 6/8/2 (Australia) providing the report of an Asia-Pacific Regional Search and Rescue Conference held in Cairns, Australia, 13 to 16 August 2001; COMSAR 6/8/4 (France) suggesting to revise COMSAR/Circ.18 – Guidance on minimum communication needs for maritime rescue co-ordination centres; and documents COMSAR 6/8/6 and COMSAR 6/8/7 (United Kingdom

and ICCL) concerning minimum requirements for SAR co-operation plans in accordance with SOLAS regulation IV/7.3 and MSC/Circ.1000.

8.26 The Sub-Committee decided that document COMSAR 6/11/1 (United Kingdom and ICCL) concerning passenger ships reporting arrival and stay in SAR regions should be considered in conjunction with documents mentioned in paragraph 8.25 above.

8.27 The delegation of Norway suggested that documents COMSAR 6/8/1 and COMSAR 6/8/8 should be considered by the Technical Working Group (WG 2) and the Operational Working Group (WG 3) as well.

8.28 The delegation of the United Kingdom informed the Sub-Committee that very little information on SAR Co-operation plans had been received.

8.29 In order to consider the above proposals in detail, the Sub-Committee instructed the SAR Working Group to consider all the documents indicated in paragraphs 8.25 and 8.26 above and, taking into account deliberations at Plenary, to:

- .1 prepare, as a matter of urgency:
 - .1.1 minimum requirements for SDPs for holding information on the SAR co-operation plan on behalf of the ship/operator and the MRCCs to ensure the provision of a prompt, reliable and error-free 24-hour service; and
 - .1.2 guidelines for ship operators and MRCCs on how to ensure that the data held by the SDPs is up to date at all times;
- .2 consider and recommend whether reporting of the arrival and stay of passenger ships in SAR regions should be contained in MSC/Circ.1000; and
- .3 prepare any recommendations and proposals which seem necessary,

for consideration by Plenary.

Report of the SAR Working Group (WG 1)

8.30 Having received and considered the report of the Working Group (COMSAR 6/WP.9), the Sub-Committee took action as summarized hereunder.

Minimum requirements for SAR data provider (SDP)

8.31 The Sub-Committee considered the proposals by the United Kingdom and ICCL (COMSAR 6/8/6) on Minimum requirements for SAR data provider (SDP) holding SAR co-operation plans and (COMSAR 6/8/7) on Guidelines for ship operators and the Search and Rescue (SAR) services on the provisions of up-to-date data held by SAR Data Providers (SDPs) and agreed to them in principle.

8.32 In order to leave the options open for entities other than RCCs to function as a SDP, e.g. shipping companies, and not to shift the relevant responsibilities too much from the RCCs to the SDP, the Sub-Committee noted that the Working Group had amended the proposed texts, as

appropriate, combined the two proposals into one set of guidelines and prepared the associated draft MSC circular, endorsed it, as set out in annex 12 and invited the Committee to approve it.

Reporting to the RCC

8.33 The Sub-Committee discussed the proposal by the United Kingdom and ICCL (COMSAR 6/11/1) on consideration of the need for reporting of passenger ships to the relevant RCC when entering SAR regions.

8.34 In considering the benefits of such a reporting requirement to either the ship, the RCC or the SDP, the Sub-Committee recalled that MSC/Circ.1000, paragraph 7 already requires contact of the shipowner with the relevant SAR services of the region for the provision of the essential voyage information to the SDP/RCC.

8.35 The Sub-Committee agreed in principle to the need for the information on the ship's voyage, in particular, in remote SAR areas, as per MSC/Circ.1000 but that there was no need for the establishment of additional reporting requirements.

8.36 Recalling that e.g. AIS equipment would have to be carried by all passenger ships latest by 1 July 2003, the Sub-Committee recognized that there were a number of other reporting requirements and polling possibilities in place which should be used in a co-ordinated manner to satisfy the information needs of the RCC and SDP, in addition to the information provided by the company initially within its ISM Code obligations, for the development and up-date of the SAR plan. The Committee was invited to note the Sub-Committee's above view on the issue.

SAR contact information

8.37 The Sub-Committee noted information provided by the delegation of Canada on the establishment of a web-site www.SARContacts.com which kept up to date information on global SAR contacts and that this system was fully compatible with the Secretariat system under development.

Termination of live telex

8.38 The Sub-Committee considered documents COMSAR 6/8/1 (Canada) and COMSAR 6/8/8 (Norway) on the problem related to the termination of live telex in these and other countries, which formed up to now an essential part of the minimum communication requirements for MRCCs, as per COMSAR/Circ.18, for transferring information/data to and from the Inmarsat Land Earth Station (LES). This problem was related to Inmarsat-A and B terminals only and there was a pressing need to consider future alternatives.

8.39 It was noted that ships were not required to have telex capability as part of the GMDSS but traditionally this feature had been very useful to SAR authorities. Many ships carry Inmarsat-A and Inmarsat-B ship earth stations, both of which offer a real time telex feature. This real time telex is more desirable from a SAR Authority perspective than store and forward data services.

8.40 The Sub-Committee noted that loss of this capability would have a serious impact on communications between ships and the RCC and instructed the Secretariat to solicit advice from Administrations and from IMSO on any acceptable alternative transmission media, with particular emphasis on the services previously available with Inmarsat-A and B equipment.

8.41 The Sub-Committee distinguished between the use of telex on landlines, in the satellite links of Inmarsat systems and on MF/HF frequencies. As for the satellite links, it concluded that “direct-printing” could be replaced by data communication systems. Also with regard to the landlines, it was of the opinion that telex could be replaced by other data communication systems.

8.42 It was pointed out that, if the requirement for MF/HF radio telex was removed, this might lead to incompatibility between ships selecting different systems. Additionally, the reliability and availability of replacement systems should be considered. It was also pointed out that there was, at present, no alternative to MF/HF radio telex in sea areas A4.

8.43 In the same context the Sub-Committee also considered the proposal by France (COMSAR 6/8/4) to review COMSAR/Circ.18 and, in light of the above discussion, agreed that this should be done at COMSAR 7 and invited submission thereon to the next session also in light of the discussion reflected in previous paragraphs.

Asia Pacific Regional SAR Conference

8.44 The Sub-Committee considered the report of the Asia Pacific Regional SAR Conference in Cairns, 13 to 16 August 2001 (COMSAR 6/8/2) and noted the following recommendations:

- .1 that ICAO and IMO make the three volumes of the IAMSAR Manual freely available to all who wish to use it, also via the Internet for free downloading;

In this context the Secretariats of ICAO and IMO stated that this was a decision to be taken by the governing bodies of the Organizations, which could also set a precedence for other publications and thereby impact at least on IMO’s technical co-operation provision.

The Secretariats were invited to investigate the cost to free the publication from ICAO/IMO commercial sales.

- .2 that both ICAO and IMO through their good offices act to promote and support this type of conference; and
- .3 that the technical committees of ICAO and IMO investigate the provision of support in providing funds for the purchase and support of computers and Internet access as a practical measure to quickly improve SAR response in smaller less well-resourced countries.

In this context the Working Group recalled that the anticipated establishment of the international SAR Fund could probably help to assist in such cases, once the pilot project for the five regional RCCs in the African regions was completed, or at least well under way, in this respect.

DEVELOPMENT OF A LIST OF CONTENTS FOR A MEDICAL FIRST-AID KIT FOR CERTAIN RO-RO PASSENGER SHIPS FOR UTILIZATION BY A MEDICAL DOCTOR

General

8.45 The Sub-Committee recalled that COMSAR 5 had agreed in principle to the need for the provision of a medical first-aid kit on ro-ro passenger ships that are not required to have a medical doctor permanently on board.

8.46 The Sub-Committee also recalled that, having agreed that the requirement for such a "medical kit" should not be related to the compliance with the provisions of the ISM Code, COMSAR 5 had agreed that this issue was an urgent matter, since SAR services include medical assistance and care as from 1 January 2001, and had invited the Committee to include a new sub-item on "Development of a list of contents for a medical first-aid kit for certain ro-ro passenger ships for utilization by a medical doctor" under the existing item "Matters concerning search and rescue, including those related to the 1979 SAR Conference and introduction of the GMDSS" with a high priority and one session to complete.

8.47 In order to expedite the work on this issue, COMSAR 5 agreed to establish a correspondence group of interested parties, including medical doctors, subject to MSC 74 assigning a high priority status to the sub-item referred to before, under the co-ordination of France, to prepare the technical annex to a possible MSC circular, with the following terms of reference:

- .1 using document MSC 70/7/2, to develop a list of contents for a medical first-aid kit for certain ro-ro passenger ships for utilization by a medical doctor;
- .2 to indicate any medical considerations to be taken into account when utilizing such a medical first-aid kit; and
- .3 to review the relevant IMO/ILO/WHO instruments to avoid duplication of work with respect to sub-paragraphs .1 and .2 above.

8.48 The Sub-Committee noted that MSC 74 had:

- .1 endorsed the Sub-Committee's action in instructing the Secretariat to consult with ILO and WHO on the development of a list of contents for medical first-aid kits for certain ro-ro passenger ships; and
- .2 noted the establishment of a correspondence group of interested parties, including medical doctors, to expedite work on the issue.

Having been advised that ILO had already agreed to participate in the work on the matter, the Committee instructed the Secretariat to pursue the issue further with WHO.

8.49 It was also noted that MSC 74 had concurred with the proposal by COMSAR 5 and had included a new sub-item concerning the issue with a high priority and one session to complete.

8.50 The Sub-Committee noted documents COMSAR 6/8/9 (Germany) proposing a list of contents for a medical first-aid kit and COMSAR 6/INF.8 (Hong Kong, China) giving information on the use of voluntary doctors on board helicopters during medical evacuation.

8.51 Having been informed by the Secretariat that the report of the correspondence group on a medical first-aid kit contents was received at IMO after the deadline for submission and it was issued as document COMSAR 6/J/4 and, taking into account comments provided by the delegation of France, the Sub-Committee agreed that the document COMSAR 6/J/4 should be also considered at this session.

8.52 The Sub-Committee referred documents COMSAR 6/8/9, COMSAR 6/INF.8 and COMSAR 6/J/4 (France) to the SAR Working Group for consideration and instructed it, taking into account comments and proposals made in Plenary, to prepare:

- .1 a list of contents for a medical first-aid kit for certain ro-ro passenger ships for utilization by a medical doctor together with the associated draft MSC circular providing guidance on the use of that medical first-aid kit; and
- .2 any recommendations and/or proposals concerning the issue,

for consideration in Plenary.

Report of the SAR Working Group (WG 1)

8.53 Having received and considered the report of the Working Group (COMSAR 6/WP.9), the Sub-Committee considered the report of the Correspondence Group on the development of a list of contents for a medical first-aid kit. Having discussed the relevant medical considerations to be taken into account for the use of an “Emergency Medical kit/bag” by a medical doctor on board certain ro-ro passenger ships which not normally carry a medical doctor and the related draft list of contents for such a kit, the Sub-Committee agreed to them, as developed by the Correspondence Group, together with the associated draft MSC circular, and invited the Committee to approve it as set out in annex 13.

8.54 The Sub-Committee instructed the Correspondence Group, subject to the authorization by MSC 75, to continue its work, under the co-ordination of France,* on the following points, in close co-operation with ILO and WHO representatives, as appropriate:

- .1 to assess responsibility and liability issues involved in the context of the use of the “Emergency Medical Kit/bag”;
- .2 to provide advice on monitoring evaluation and research on the use of the medical kit in emergency incidents; and
- .3 to consider reports submitted by Member Governments on their experience gained in the use of the emergency kit, to the co-ordinator of the Correspondence Group.

8.55 The Director of Legal Affairs and External Relations Division provided advice in the context of the liability issue raised in paragraph 8.54.1 above, she noted that the situation was not one where a company employed a ship’s doctor. Instead, it was a situation in which there was no ship’s doctor and where the kit was not intended for use by the ship’s crew but by a passenger who happened to be a doctor or was otherwise medically qualified (e.g., a nurse). The kit was designed to cater for a medical emergency of some sort that might occur during the course of a voyage and contained specialized equipment for possible use by a doctor/passenger who might be asked by the ship’s master or who volunteered to assist in such an emergency situation. The doctor/passenger could not be forced to use the kit – the decision to do so would be his or hers alone but if he/she did elect to use it in treating the sick/injured person, potential legal obligations and liabilities would undoubtedly arise.

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In relation to the kit itself, there would be an obligation on both the master and the ship's company to keep the kit in good repair; if either neglected to do so, both would be open to an action for damages in negligence/tort.

Assuming the kit was in good repair but something went wrong with the treatment given by the passenger/doctor leading to the physical injury to or death of the patient, the position was that the passenger/doctor might well be liable if he/she acted negligently. In assessing negligence the court would ask whether the doctor acted reasonably in all the circumstances of the case. This involved questions on both the fact and the law. The emergency nature of the situation would be taken into account, in assessing what was reasonable action on the doctor's part. But this was only one relevant factor.

As for the liability of the master or the ship's company, as a general rule, the master or ship's company would not incur liability merely by asking for the doctor's assistance. Nor would the master or the ship's company normally be liable vicariously for any negligence on the doctor's part in treating the patient – this was because the doctor in such a situation would not be employed by the company and nor could the doctor be regarded as acting as the agent of the company; (this situation compared with one in which a doctor on board a passenger liner is employed as such by the ship's company, in which event vicarious liability on the part of the master or the ship's company would in all likelihood exist).

The Director also noted that she could not foresee a situation in which the master or the ship's company could be held negligent merely for having the kit on board and making it available to the doctor/passenger.

8.56 The Sub-Committee noted that the work on the list of contents for the “emergency medical kit/bag” was completed and agreed that a wider representation of medical experts should be invited for the future work proposed above.

8.57 The Sub-Committee agreed that the marking of the “emergency medical kit/bag” should be in accordance with the IAMSAR Manual, Volume I and invited Member Governments to submit reports on the experience gained in the use of the kit to the co-ordinator of the Correspondence Group.

REVIEW OF SAFETY MEASURES AND PROCEDURES FOR THE TREATMENT OF PERSONS RESCUED AT SEA

8.58 The Sub-Committee noted that the Assembly, at its twenty-second session, had considered, with a view to finalization, a draft Assembly resolution on Review of safety measures and procedures for the treatment of persons rescued at sea, which had been proposed by the Secretary-General and unanimously approved by the Council at its twenty-first extraordinary session.

In this context, the Assembly noted that, in parallel with the initiative to seek adoption of the draft Assembly resolution, the Secretary-General had brought the issue of persons rescued at sea to the attention of a number of competent United Nations specialized agencies and programmes pointing out the need for a co-ordinated approach to all attendant aspects at the United Nations inter-agency level. Further to proposing a review of the relevant legislation adopted by the competent United Nations agencies and programmes, the Secretary-General had also proposed the establishment of a co-ordinating mechanism (possibly in the form of an inter-agency co-ordinating panel to be activated when the circumstances so dictate) to ensure that the response of the United Nations in any future emergency can be co-ordinated in a consistent manner. It

further noted that developments on this initiative, on which the Secretary-General has received positive responses, would be reported in due course.

MSC/ES.1, noting that the draft Assembly resolution on the Review of safety measures and procedures for the treatment of persons rescued at sea requested the Committee to take action within its context, agreed that COMSAR 6 should, without committing MSC 75 as to its actions, give preliminary consideration to any necessary action to give effect to the requests of the Assembly within the Sub-Committee's purview; and instructed the Secretariat to forward that resolution to COMSAR 6.

After detailed consideration and having agreed to some modifications to the proposed draft Assembly, reflecting a number of amendments proposed by Norway and a reference to the Secretary-General's UN inter-agency initiative, the Assembly adopted resolution A.920(22) on Review of safety measures and procedures for the treatment of persons rescued at sea, as set out in annex 2 to COMSAR 6/2/1 (Secretariat).

8.59 The Sub-Committee, recalling the opening remarks of the Secretary-General on this issue, recognized the main thrust of operative paragraph 1 of resolution A.920(22) was for the relevant Committee to review, on a priority basis, the international conventions referred to the preambular paragraph 8 and any other IMO instruments under their scope for the purpose of identifying any existing gaps, inconsistencies, ambiguities, vagueness or other inadequacies and, in the light of such review, to take action as appropriate so that:

- .1 survivors of distress incidents are provided assistance regardless of nationality or status or the circumstances in which they are found;
- .2 ships, which have retrieved persons in distress at sea, are able to deliver the survivors to a place of safety; and
- .3 survivors, regardless of nationality or status, including undocumented migrants, asylum seekers and refugees, and stowaways, are treated, while on board, in the manner prescribed in the relevant IMO instruments and in accordance with relevant international agreements and long-standing humanitarian maritime traditions.

8.60 The Sub-Committee briefly considered document COMSAR 6/8/5/Rev.1 (English version) by France proposing a methodology in considering the issue and referred it to the SAR Working Group for further consideration.

8.61 The Sub-Committee instructed the SAR Working Group to consider document COMSAR 6/8/5/Rev.1 and, taking into account comments and proposals made in Plenary, prepare any recommendations on the issue concerning SAR technical and operational aspects for consideration in Plenary with a view to advice MSC 75 accordingly.

Report of the SAR Working Group (WG 1)

8.62 Having received and considered the report of the Working Group (COMSAR 6/WP.9), the Sub-Committee took action as outlined hereunder.

8.63 Recalling the Secretary-General's opening remarks on resolution A.920(22) and the issue of safety of persons rescued at sea, in particular the information on the establishment of interagency mechanism to consider, among United Nations Programmes and Agencies concerned, the issue in a holistic manner, the Sub-Committee considered the proposal by France (COMSAR 6/8/5/Rev.1) on a methodology and principles to be used for reviewing the relevant regulations of the SOLAS and SAR Conventions with a view to identifying any gaps, ambiguities, vagueness, inconsistencies, etc., as per operative paragraph 1 of that resolution.

8.64 A proposal by Norway from the floor, to amend both the SOLAS and SAR Conventions by including provisions for obligations on both master and coastal State to deliver and receive persons rescued at sea respectively, was also considered.

8.65 The delegation of Australia, supported by the delegation of the United States, opposed any proposals for amendments to the SOLAS and SAR Conventions which would have the effect of extending convention obligations to encompass disembarkation of rescued persons at a particular port or any implied or direct provision that the master should have the ultimate right to decide this. It was their view that this was the responsibility of relevant authorities of the coastal States in conjunction with the flag State.

8.66 Several delegations noted that the issues involved were complex and dealt with additional issues outside the scope of the SOLAS and SAR Conventions.

8.67 The Sub-Committee expressed the view that the Organization should be providing more certainty for the Master in these situations.

8.68 The Sub-Committee fully agreed that actions taken should not have the effect of deterring the master from fulfilling the obligations to go to the assistance of persons in distress at sea.

8.69 The Sub-Committee discussed the issue in depth, in particular, whether or not there should be any provision for landing rescued persons ashore in the instruments under consideration.

8.70 It was agreed that there were two different issues to be considered namely:

- .1 the purely SAR aspect of rescuing any person in distress at sea, regardless of their nationality, status or circumstance and deliver them to a place of safety under the SOLAS and SAR Conventions; and
- .2 consideration of the status of the person after the rescue when other related international instruments and matters of national concerns would subsequently have to be taken into consideration.

8.71 The Sub-Committee agreed that the matter mentioned in paragraph 8.70.2 above was beyond its remit, if not of the Organization, and would have to be discussed in the above interagency group in a holistic manner.

8.72 As to the principles of SAR, it was clear that IMO and this Sub-Committee were the only world expert bodies to address the purely humanitarian issues involved. Whether other issues of concern should be taken into account in the work of the Organization, was for the Committee, as parent body, to decide. The Sub-Committee and its SAR Working Group, as purely technical

bodies, needed to decide on certain basic global principles, within its remit, to assist the further consideration by MSC 75.

8.73 These basic principles were identified, *inter alia*, as follows:

- .1 MRCCs nowadays in practice co-ordinate the SAR operation, the advice of which the master would usually have to follow to comply with his responsibilities under SOLAS;
- .2 the master of the ship should not be left alone with his responsibilities, once he has rescued the persons in distress;
- .3 the global SAR system in place to date has worked satisfactorily in nearly all distress cases and its integrity should not be compromised in any way, which could potentially discourage the masters from complying with their obligations under the SOLAS and SAR Conventions;
- .4 in considering a frame work of international regulations which should be not too prescriptive, the above status quo should not be jeopardised;
- .5 the principles of preambular paragraph 3 of the SAR Convention in providing a global SAR plan should continue to be the guiding principle; and
- .6 the humanitarian treatment of all persons rescued at sea should be of paramount importance.

8.74 The Sub-Committee agreed that there were identified gaps in the SOLAS and SAR Conventions in relation to the disembarkation of persons rescued from distress at sea and bringing them to a place of safety, which implied a lot of other issues, outside of the remit of the Working Group and the Sub-Committee, which needed to be addressed by other IMO bodies and indeed other international organizations. Such issues included:

- .1 the identification of the legal status of the persons after their rescue;
- .2 preventing persons from getting into a distress situation;
- .3 to balance SAR concerns with sovereignty concerns; and
- .4 bilateral agreements, other than SAR agreements, between States concerned.

8.75 The Sub-Committee noted in this context the commitment of the United Nations High Commissioner for Refugees (UNHCR) to provide assistance to countries concerned in the humanitarian treatment and handling of asylum seekers rescued at sea. A background Note concerning the competence of UNHCR in relation to rescue at sea matters is given at annex 14.

8.76 The Sub-Committee noted that the SAR Working Group Chairman had summed up the discussion as follows:

- .1 there was a need to clarify the term “place of safety”;
- .2 the relevant MRCC should co-ordinate where to deliver persons after their rescue;

- .3 the provision of the global SAR plan should be ensured;
- .4 the obligations of masters and governmental obligations needed to be more closely balanced;
- .5 the need to consider the relevant provisions of the SAR and SOLAS Conventions in this regard might necessitate an intersessional SAR meeting and that the Sub-Committee should invite MSC 75 to authorize such a meeting, subject to the concurrence of the Council.
- .6 no detailed amendments to the two conventions could be considered at this stage; and
- .7 the MSC should be invited to instruct the Sub-Committee to consider the need for amendments to both conventions in the short/medium term, in view of the gaps identified above, and whether the existing conventions provide the right framework for the provision of global SAR services.

8.77 The Secretariat observed that the masters' "obligations" and "responsibilities" are well established and constitute services they ably provide in compliance with century-long humanitarian traditions and international law, and, if necessary, efforts should be made to create a clear and unambiguous regulatory régime which would not put them in any dilemma as to their actions relating to rescuing persons in distress at sea.

8.78 The Sub-Committee was in full agreement with the expressed plea that every effort should be made to avoid the development of any issues which might have a negative impact on the integrity of the search and rescue system the Organization had put in place globally over the years.

8.79 The Sub-Committee invited Member Governments to submit relevant substantive proposals to MSC 75 on this issue for further consideration.

9 BRIDGE-TO-BRIDGE RADIOCOMMUNICATIONS

General

9.1 The Sub-Committee noted that MSC 74 had concurred with the proposals by France and COMSAR 5 and had included in the Sub-Committee's work programme and the provisional agenda for COMSAR 6 a new high priority item "Bridge-to-bridge radiocommunications", with a target completion date of 2003.

9.2 The Sub-Committee recalled that MSC 72, having noted that some regulations of SOLAS chapter IV, such as regulations IV/3.2.3 (Exemptions), IV/7.2, 7.3 and 7.4 (Radio equipment: General) and IV/12.4 (Watches) were no longer applicable as of 1 February 1999, had authorized COMSAR 5 to prepare appropriate draft amendments and/or adjustments to chapter IV under its agenda item "Global Maritime Distress and Safety System" for further consideration by the Committee.

9.3 It was noted that, in approving the amendments/adjustments to chapter IV proposed by COMSAR 5, MSC 74 had considered document MSC 74/9/5 (Denmark and Netherlands) proposing that SOLAS regulation IV/12.3 should be amended for consistency with resolution MSC.77(69) by which the Committee had decided that 1 February 2005 should be the final date

of cessation of watchkeeping by GMDSS ships on VHF channel 16, noting that subsequently resolution MSC.77(69) had been brought to the attention of ITU Member States.

The Committee instructed COMSAR 6 to consider document MSC 74/9/5 together with any other relevant documents concerning bridge-to-bridge radiocommunications and, taking into account the Committee's discussion on the issue, to advise MSC 75 if there is a need to determine a date of cessation of watchkeeping by SOLAS ships on VHF channel 16 other than that indicated in resolution MSC.77(69).

Watchkeeping on VHF channel 16 by SOLAS ships

9.4 The Sub-Committee initially considered documents COMSAR 6/9 (United States) suggesting to further extend the requirements for SOLAS ships to maintain a continuous listening watch on VHF channel 16 beyond 1 February 2005; COMSAR 6/9/1 (Denmark, Finland, France, Germany, Ireland, Sweden and United Kingdom) drawing attention to the importance of maintaining the decision already taken and announced by MSC 69, and proposing adoption of a MSC resolution encouraging ships to continue watchkeeping on VHF channel 16 on a voluntary basis for general inter-ship calling purposes after 1.2.2005; COMSAR 6/9/2 (ILF and ISAF) supporting proposal by the United States in document COMSAR 6/9 and providing arguments for the need to maintain watch on VHF channel 16; and COMSAR 6/9/3 (Norway) inviting the Sub-Committee to take the necessary steps (a draft MSC resolution or appropriate amendments to regulation IV/12) to require or encourage ships and coast radio stations to always have their VHF radio installations turned to channel 16 for safety purposes other than distress, when the installation is not occupied with radiocommunications on other channels.

9.5 After considerable and very long discussion of the issue the Sub-Committee:

- .1 agreed that the existing SOLAS regulation IV/12.3 should not be changed; and
- .2 prepared a draft MSC resolution on Maintenance of a continuous listening watch on VHF channel 16 by SOLAS ships whilst at sea after 1 February 1999 and installation of VHF DSC facilities on non-SOLAS ships, revoking resolution MSC.77(69).

9.6 The Committee was invited to take account of the Sub-Committee's advice on continuation of the watch on VHF channel 16 as indicated in paragraph 9.5 above and approve the draft MSC resolution, given in annex 15, highlighting the issue.

Bridge-to-bridge radiocommunications

9.7 Noting that no documents had been received on bridge-to-bridge radiocommunications matters at this session, the Sub-Committee invited Member States to submit their appropriate comments and proposals to COMSAR 7.

10 PLACES OF REFUGE

General

10.1 The Sub-Committee recalled that COMSAR 5, noting that MSC 73 submitted this issue to the Sub-Committee one week prior to that session, had agreed:

- .1 that the issue was relevant to its work on SAR, as permitting a ship into a port might be one possibility to save lives;
- .2 to invite the Committee to include into the Sub-Committee's work programme a corresponding item on "Port of refuge" with one session to complete;
- .3 that more time was needed for detailed consideration of the matter on the national level;
- .4 to invite submissions on this issue to COMSAR 6; and
- .5 to invite the Committee to instruct the NAV Sub-Committee to consider the matter as a co-ordinating sub-committee.

10.2 It was noted that MSC 74 (MSC 74/24, paragraphs 2.15 to 2.31 and 21.31) had further considered the issue and, in order to make progress on it, the Committee had agreed with the Chairman's proposal that, at present, the issue should be considered from the operational safety point of view, and the most appropriate sub-committee for this was the NAV Sub-Committee (to act as the co-ordinator of possible contributions from other sub-committees, e.g. COMSAR, DE, etc. and the SPI Working Group).

Without prejudice to the Committee's work, the NAV Sub-Committee was also instructed to consider drafting guidelines on:

- .1 action expected from coastal States providing places of refuge to ships in distress;
- .2 the evaluation of risks associated with the provision of places of refuge; and
- .3 action masters of ships in distress should take when in need of places of refuge (including action on board and action required by other ships in their vicinity, salvage operators and coastal States).

10.3 The Sub-Committee also noted that NAV 47, taking into account the preliminary discussions in the plenary and the decisions of other IMO bodies, had prepared draft terms of reference for the consideration of MSC 75 and MEPC 47 for further work on the issue (annexes 18 and 19 to NAV 47/13).

NAV 47 agreed that apart from the decision of MSC 74 for the NAV Sub-Committee to be the co-ordinating sub-committee, the COMSAR Sub-Committee should be invited to provide the initial input for further progress and the MEPC should be informed about the progress in the matter. The NAV Sub-Committee also agreed that in case it was necessary at later stage other IMO bodies such as the SLF, STW, DE and FSI Sub-Committees and the SPI Working Group could be requested to provide further inputs.

10.4 The Sub-Committee noted that no submissions had been received concerning the matter and instructed the SAR Working Group (WG 1) to consider the issue from the purely SAR services point of view, taking into account documents MSC 74/2/4, paragraph 2.25 of MSC 74/24 and NAV 47/WP.5 on deliberations made by other IMO bodies.

Report of the SAR Working Group (WG 1)

10.5 Having considered the report of the Working Group (COMSAR 6/WP.9), the Sub-Committee agreed that, although a place of refuge issue might, in some cases, start as a SAR case, the subsequent operation, e.g. after the crew had been taken off the ship, was either of commercial or environmental concern.

10.6 Unless a place of refuge was actually used for the safe evacuation of the persons on board, the Sub-Committee's and the SAR Working Group's involvement in this matter was very limited.

10.7 The Sub-Committee agreed, however, that the SAR services of the country concerned should be actively involved in the operation of the port of refuge case.

10.8 Noting that, as suggested by the Sub-Committee, the NAV Sub-Committee was appointed to co-ordinate the work on this issue, it invited the Committee to draw MSC/Circ.892 on Alerting of SAR Authorities to the attention of NAV 48 to take into account in its work and to refer the outcome of NAV 48 thereon to COMSAR 7 for consideration.

10.9 The Committee was also invited to delete the Sub-Committee's work programme item "place of refuge," as the work had been completed.

11 LARGE PASSENGER SHIP SAFETY

General

11.1 The Sub-Committee noted that MSC 74 had approved an updated work plan on large passenger ship safety (MSC 74/WP.6, annex 3), assigning a number of tasks to the Sub-Committee, and had included a high priority item on "Large passenger ship safety" in the work programme and provisional agenda of COMSAR 6 with a target completion date of 2003.

11.2 The Sub-Committee briefly considered document COMSAR 6/11 (Secretariat) providing the outcome of MSC 74 on the issue and the listing of tasks assigned to the Sub-Committee. In particular, it was noted that:

- .1 the Committee had approved a guiding philosophy, strategic goals and objectives, as set out in annex 1, and agreed that this approach would provide sub-committees concerned with a structured and focused way forward for dealing with large passenger ship safety matters;
- .2 the Committee had agreed to the areas for consideration, as set out in annex 2, with the view that the subsidiary bodies assigned work on this issue should use the information contained in the aforementioned annex as additional guidance to clarify the intent of assigned objectives and tasks; and
- .3 with respect to work to be accomplished, the Committee had approved the updated work plan, as set out in annex 3, and conveyed documents MSC 73/WP.20 and MSC 74/WP.6 to the appropriate sub-committees for background purposes.

11.3 The Sub-Committee agreed with a proposal by Norway that document COMSAR 6/11 should be considered by all working groups.

11.4 The Sub-Committee also noted documents COMSAR 6/11/3 and COMSAR 6/INF.9 by the United States describing a gap analysis to identify areas where IMO instruments are satisfactory, and areas where gaps may exist, as well as possible solutions to address these gaps, performed by the United States to assist the Sub-Committee.

11.5 Some delegations were of the opinion that a gap analysis (GA) approach was not sufficient by itself. It was also pointed out that a definition of a large passenger ship, which does not exist yet, was important to consider the issue from SAR and radiocommunications point of view.

11.6 Since this is a new agenda item and in view of the work to be undertaken, the Sub-Committee was of the opinion that a correspondence group should be established to progress the work intersessionally and report to COMSAR 7 thereon.

11.7 In agreeing so, the Sub-Committee instructed the SAR Working Group to:

- .1 consider the issue of large passenger ship safety;
- .2 prepare the terms of reference for the Correspondence Group taking into account the comments and decisions made in Plenary; and
- .3 propose a co-ordinator of the Correspondence Group and a list of volunteers to participate in the group.

Report of the SAR Working Group (WG 1)

11.8 Having received and consider the report of the SAR Working Group (COMSAR 6/WP.9), the Sub-Committee took action as summarized hereunder.

11.9 The Sub-Committee, recognizing that an MSC Correspondence Group on LPS still continued to work on future tasks and priorities to be given to other IMO bodies on this issue, which would report to MSC 75 in due course, agreed that, at this stage of the work in hand:

- .1 large passenger ships should be built and equipped so that they function as their own lifeboats and that evacuation should not become necessary, therefore not too much emphasis should be put on the availability of adequate SAR services to sustain LPS operations;
- .2 the work at hand should therefore concentrate on the availability of adequate SAR services for existing ships;
- .3 positive developments could be reported to the Committee on the development of the "Emergency Medical kit/bag" in this context and the further work underway with respect to medical SAR services;
- .4 SAR experts should be encouraged to participate in the MSC LPS Working Group;

- .5 the gap analysis proposed in document COMSAR 6/11/3 (United States) was one good way to address the SAR issues involved in addition to the Formal Safety Assessment (FSA) method (MSC/Circ.829) and other methods and could be used in the future work; and
- .6 a correspondence group should be established to progress work on the tasks given to the Sub-Committee, as set out in annex 3 to document COMSAR 6/11.

11.10 The Sub-Committee agreed on the establishment of the correspondence group under the co-ordination of the United Kingdom with the terms of reference, as set out in annex 3 to document COMSAR 6/11 under the column “Objectives and tasks”; and instructed it, taking the outcome of MSC 75 on this matter into account, to exchange views and report to COMSAR 7 thereon. Member States were invited to participate in the correspondence group and report their intention to do so to the co-ordinator.

11.11 The delegations of the Bahamas, Cyprus and Liberia reserved their position on the establishment of the Correspondence Group.

11.12 The Secretariat was requested to place the relevant background documents for this work (MSC 73/WP.20 and MSC 74/WP.4 on the IMO’s web-site.

Search and rescue exercise

11.13 Hong Kong, China submitted document COMSAR 6/11/2 on lessons learned from a SAR exercise conducted on board a passenger ship, highlighting a number of recommendations resulting from that exercise, namely that:

- .1 transportation safety lock mechanism of the escape chute, if not removed, may cause delay in opening the escape chute;
- .2 communication equipment used by port fire services may be attenuated in ship’s environment; and
- .3 ship’s crew assigned to take injured persons to a rescue helicopter should be fully briefed on safety when working in the vicinity of the helicopter.

11.14 Having considered the recommendations in detail, the Sub-Committee invited MSC 75 to consider instructing:

- .1 the DE Sub-Committee to consider the issue mentioned in paragraph 11.13.1 above under the item “Large Passenger Ship Safety” – adequacy of life saving appliances – reliability of equipment; and
- .2 the STW Sub-Committee to consider the issue indicated in paragraph 11.13.3 above under item “Large Passenger Ship Safety”,

and invited the delegation of Hong Kong, China to prepare a draft amendment to the IAMSAR Manual, Volume III relating to the issue raised in paragraph 11.13.3 above, and encouraged other JWG members and observers to submit proposals on the issue raised in paragraph 11.13.2 above to JWG 9 for consideration.

11.15 The delegation of Hong Kong, China offered to submit substantive proposals on the relevant issues to DE 46, STW 34 and COMSAR 7.

11.16 The delegation of the United Kingdom informed the Sub-Committee of the availability of an instructional video on “Helicopter operations at sea” which takes this issue into account.

Report of the Technical Working Group

11.17 Having received the report of the Technical Working Group (COMSAR 6/WP.4), the Sub-Committee noted that the working group did not find items that seem to require special technical consideration. However, it was pointed out that simultaneous use of a high number of locating transmitters could cause difficulties for homing operations and that simultaneous use of numerous cellular telephones during emergency situations, could create difficult EMC conditions.

12 REVISION OF THE FISHING VESSEL SAFETY CODE AND VOLUNTARY GUIDELINES

General

12.1 The Sub-Committee noted that MSC 74 had considered the request by SLF 43 to the FP, COMSAR, NAV, DE and STW Sub-Committees to review and prepare final texts of relevant chapters of the draft revised fishing vessel Safety Code and Voluntary Guidelines and agreed to include, in the work programmes of these sub-committees and in the provisional agendas for FP 46, COMSAR 6, NAV 48, DE 45 and STW 33, a high priority item on “Revision of the fishing vessel Safety Code and Voluntary Guidelines”, with a target completion date of 2003.

The Sub-Committee was instructed to review and prepare the final texts of the relevant chapters and forward any proposed amendments to SLF 46 for co-ordination purposes.

12.2 The Sub-Committee also noted that SLF 44 had agreed with the view of the delegation of Japan that, on matters covered by the 1993 Torremolinos Protocol, the standards contained in the fishing vessel Safety Code should not exceed those of the Protocol and that sub-committees should take this view into account when reviewing both the draft Code and the Voluntary Guidelines (SLF 44/18, paragraph 5.16).

Establishment of a drafting group

12.3 After preliminary consideration of document COMSAR 6/12 (Secretariat) reporting on the outcome of SLF 44 on the revision of the above-mentioned Code and Voluntary Guidelines, the Sub-Committee established the drafting group (DG 1) under the Chairmanship of Mr. K. Fisher (United Kingdom) and instructed it to:

- .1 review the GMDSS provisions of the draft Code and Guidelines set out in annexes 1 and 2 to document COMSAR 6/12 taking into account comments and decisions made in Plenary; and
- .2 prepare draft amendments deemed necessary.

Outcome of the drafting group

12.4 Having considered the report of DG 1 (COMSAR 6/WP.3), the Sub-Committee took action as summarized hereunder.

12.5 The Sub-Committee noted that the Group had considered the draft revised Safety Code and Voluntary Guidelines, based on the Torremolinos Protocol, set out in annexes 1 and 2 to document COMSAR 6/12, noting that the Code applied to fishing vessels of 24 m in length and above and Guidelines applied to fishing vessels of 12 m in length and above but less than 24 m in length. In the discussion, points of interest addressed were: the number of two-way telephone apparatus had been reduced from 3 to 2, and the number of SARTs from 2 to 1, alternative arrangements to the use of DSC were permitted, requirements for sea area A4 had not been included, alternatives to the NAVTEX service for local MSI were permitted, the period of operation of the reserve source of energy was fixed at 3 hours, performance standards approved by a competent authority not necessarily conforming to those of the Organization were permitted and a single means of availability was permitted for sea area A3 vessels. The group was of the view that all this was a pragmatic approach for these small vessels.

12.6 The Sub-Committee pointed out the following editorial errors in annexes 1 and 2:

- .1 the word "INMARSAT" should be "Inmarsat" throughout;
- .2 paragraph 9.5.1.1.2, "radiotelephone" should be "radiotelephony";
- .3 paragraph 9.6.1.1, "9.5.1.6" should be "9.6.3"; and
- .4 paragraph 9.8.2.1, "27,900 kHz" should be "27,500 kHz".

12.7 The Sub-Committee, noting that direct-printing telegraphy is now little used by vessels and that there are few coast stations which offer a direct-printing telegraphy service, recommended that requirements for the carriage of direct-printing telegraphy should be deleted from the annexes as follows:

delete paragraph 9.8.2.3 in annex 1 and annex 2.

It was also suggested to delete paragraph 9.6.4 in annexes 1 and 2.

12.8 The Sub-Committee agreed that an additional clause be added to paragraph 9.10.1 in annexes 1 and 2 as follows:

- “.5 on the radiotelephone distress frequency 2,182 kHz if the vessel is operating within the radiotelephone coverage of an MF coast station in which continuous DSC alerting is not available or is not fitted with the MF DSC functions in paragraphs 9.7.1.1 and 9.7.1.2. This watch should be kept at the position from which the vessel is normally navigated.”,

and a further clause 9.10.3:

"9.10.3 Every vessel, while at sea, should maintain, when practicable, a continuous listening watch on VHF channel 16."

12.9 The Sub-Committee also agreed to the following amendments:

- .1 add the following paragraph after paragraph 9.13.7 in annex 1 and annex 2:

"9.13.8 Satellite EPIRBs should be tested at intervals not exceeding 12 months for all aspects of operational efficiency with particular emphasis on frequency stability, signal strength and coding. However, in cases where it appears proper and reasonable, the Administration may extend this period to 17 months. The test may be conducted on board the vessel or at an approved testing or servicing station."; and

- .2 add the following paragraph after 9.15 in annex 1 and annex 2:

"9.16 Position-updating

All two-way communication equipment carried on board a vessel to which this chapter applies which is capable of automatically including the vessel's position in the distress alert should be automatically provided with this information from an internal or external navigation receiver, if either is installed. If such a receiver is not installed, the vessel's position and the time at which the position was determined should be manually updated at intervals not exceeding four hours, while the vessel is underway, so that it is always ready for transmission by the equipment."

12.10 The Sub-Committee was of the opinion that the proposed draft amendments in paragraph 12.9 above, if incorporated into the Code and Voluntary Guidelines, would decrease quantity of false alerts world-wide and improve the efficiency of SAR services.

12.11 The Committee was invited to delete the item "Revision of the fishing vessel Safety Code and Voluntary Guidelines" from the Sub-Committee's work programme, as the work on it had been completed.

12.12 The Sub-Committee instructed the Secretariat to convey section 12 of this report to SLF 45.

13 MATTERS RELATED TO BULK CARRIER SAFETY

13.1 The Sub-Committee noted that by document MSC 74/5/2 the United Kingdom had presented to MSC 74 recommendations of the Re-opened Formal Investigation into the loss of the **MV Derbyshire** so as to advise the Committee's discussions on bulk carrier safety.

Paragraph 5 of the document MSC 74/5/2 says:

"Navigational Matters

5 The IMO should require the compulsory daily reporting of the position of all vessels (14.5):

- .1 In the event of a sinking the float-free EPIRB, which are now fitted to most sea going ships, will transmit the ship's location to the SAR services, achieving much of the recommendation's objective. Nevertheless there is much value in such daily reporting, however in a non-abandonment

situation it is considered that adoption of this recommendation may require an amendment to SOLAS."

13.2 The Sub-Committee also noted that, having discussed on whether IMO should require the compulsory daily reporting of the position of all ships, MSC 74 had recognized that an active reporting system would be an effective measure with no cost involved, and requested the NAV and COMSAR Sub-Committees to consider the full implications including its practicability.

The Committee assigned various tasks to the COMSAR, NAV, DE and SLF Sub-Committees and, consequently, included, in these Sub-Committees' work programme, a high priority item on "Matters related to bulk carrier safety", with a target completion date of 2002; and included the same item in the provisional agendas for COMSAR 6, NAV 48, DE 45 and SLF 44.

13.3 Having noted that no submissions had been received on the issue, the Sub-Committee recalled that there were reporting provisions in IMO instruments, such as:

- .1 regulation 11 – *Ship reporting systems* of the revised chapter V (coming into force 1 July 2002) says that "this regulation does not address ship reporting systems established by Governments for SAR purposes, which are covered by chapter 5 of the 1979 SAR Convention, as amended."; and
- .2 chapter 5 of the SAR Convention, as amended, says that: "Ships reporting systems may be established either individually by Parties or in co-operation with other States, where this is considered necessary to facilitate search and rescue operations."

13.4 In providing comments on document MSC 74/5/2, paragraph 5, the delegation of the United Kingdom pointed out that, taking into account that bulk carriers, in most cases, sank fast and without trace, daily reporting by ships to companies was strongly recommended.

13.5 After some discussions of the issue and noting that it would take some time for automatic tracking/polling technology to be implemented, the Sub-Committee agreed to the draft MSC circular on Guidance on ships daily reporting of their positions to their companies, given in annex 16, for submission to the Committee for approval.

13.6 The Committee was invited to delete the item "Matters related to bulk carrier safety" from the Sub-Committee's work programme, as the work on it had been completed.

14 DEVELOPMENTS IN MARITIME RADIOCOMMUNICATION SYSTEMS AND TECHNOLOGY

General

14.1 The Sub-Committee noted that MSC 74, taking into account a recommendation made by COMSAR 5, had considered document MSC 74/21/11 (France) and had included a new item "Developments in maritime radiocommunication systems and technology" in the Sub-Committee's work programme and the provisional agenda for COMSAR 6.

14.2 The Sub-Committee also noted COMSAR 6/INF.11 (Norway) providing information on the use of 869.850 MHz short-range radio systems on board Norwegian ships.

14.3 Pointing out that no substantial documents had been received under this agenda item, the Sub-Committee instructed the Technical Working Group to brainstorm the matter based on documents MSC 74/21/11 and COMSAR 5/3 (France) and propose any recommendations for consideration in Plenary.

Report of the Technical Working Group (WG 2)

14.4 Having received and considered the report of the Working Group (COMSAR 6/WP.4), the Sub-Committee noted the view of the Group that information on national use of new technologies and new radio systems should be exchanged, and, therefore, invited Member States to make their appropriate contributions to COMSAR 7.

15 REVISION OF THE IAMSAR MANUAL

General

15.1 The Sub-Committee noted that, in accordance with the procedures prescribed in the annex to resolution A.894(21) and, being advised that ICAO had already approved the proposed by COMSAR 5 draft amendments, MSC 74 had adopted the amendments to the IAMSAR Manual for dissemination by means of MSC/Circ.999, having decided that the amendments should enter into force on 1 July 2002.

15.2 The Sub-Committee also noted documents COMSAR 6/15 (Russian Federation), COMSAR 6/15/1 (ILF and ISAF) and COMSAR 6/15/2 (France) and referred them to the SAR Working Group (WG 1) for consideration with documents COMSAR 6/11/2 (Hong Kong, China) and COMSAR 6/8 (Secretariat) containing proposals on amending the IAMSAR Manual as well.

15.3 The SAR Working Group was instructed to consider the above-mentioned documents and, taking into account comments made in Plenary, prepare:

- .1 draft amendments to the IAMSAR Manual recommending a date of their application together with the associated draft MSC circular on their adoption; and
- .2 relevant comments and proposals,

for consideration at Plenary.

Report of the SAR Working Groups

15.4 Having received the report of the Working Group (COMSAR 6/WP.9), the Sub-Committee considered and agreed the draft MSC circular, as amended, on Adoption of the amendments to the IAMSAR Manual and the incorporated amendments, given in annex 17, for submission to ICAO for approval and MSC 75 for adoption.

15.5 The delegations of Cyprus and Greece reserved their position with regard to the draft amendments to Appendix G to document COMSAR 6/8, as amended.

15.6 The Secretariat was instructed to convey the proposed draft amendments to ICAO for approval.

15.7 The Committee was invited to adopt the draft MSC circular, taking into account the response received from ICAO.

Extract of the IAMSAR Manual, Volume III

15.8 Recalling recommendation 8/4 – **Operational manual for small boat users** from the eighth session of the Joint ICAO/IMO Working Group (COMSAR 6/8, paragraph 3.8.3), the Sub-Committee considered a proposal by ILF and ISAF (COMSAR 6/15/1) on the publication of an extract of the IAMSAR Manual, Volume III for the use on small, non-convention ships.

15.9 The Sub-Committee agreed in principle to the proposal by the ILF observer to prepare the appropriate text of an extract of Volume III in co-operation with ISAF and Germany for submission to JWG 9 for consideration and reporting to COMSAR 7 thereon.

Protection of MRCCs

15.10 The delegation of France (COMSAR 6/15/2) requested confirmation on the fact that the protection which, under the terms of the second Geneva Convention, applies to coastal installations used by rescue craft, also applies to MRCCs.

15.11 The observer from ICRC stated (full statement given in annex 4 of COMSAR 6/WP.9) that the protection provided by that Convention could indeed apply to MRCCs, subject to them being “exclusively used for their humanitarian missions”.

15.12 In view of this confirmation received the delegation of France agreed to prepare, with the assistance of ICRC, a corresponding draft amendment to the IAMSAR Manual for consideration by JWG 9 and reporting thereon to COMSAR 7.

16 DEVELOPMENT OF A PROCEDURE FOR RECOGNITION OF MOBILE-SATELLITE SYSTEMS

General

16.1 The Sub-Committee recalled that MSC 72 had considered the outcome of the twenty-first session of the Assembly (MSC 72/21/1, paragraphs 3.7.1, 3.7.2 and 3.11.1) relevant to the work of the Sub-Committee and had requested the Sub-Committee, in the context of resolution A.888(21) – *Criteria for the provision of mobile-satellite communication systems in the Global Maritime Distress and Safety System (GMDSS)*, to ensure that, for mobile-satellite communication systems to be recognized by the Organization for use in the GMDSS, they should be compatible with appropriate SOLAS requirements and also that any such recognition should not result in substantial changes having to be made to existing procedures and equipment performance standards. Consequently, the Committee decided to include, in the Sub-Committee’s work programme, a new high priority item on “Development of a procedure for recognition of mobile-satellite systems”, with 2 sessions needed to complete the item.

16.2 The Sub-Committee noted that MSC 74 had agreed to the proposal by COMSAR 5 and included that agenda item in the provisional agenda for COMSAR 6.

16.3 Having noted that no submissions had been received under this agenda item, the Sub-Committee instructed the Operational Working Group (WG 3) to consider the issue based on resolution A.888(21) and prepare any proposals, comments, recommendations and, if possible draft procedures for consideration in Plenary.

Report of the Operational Working Group (WG 3)

16.4 Having considered the report of the Group (COMSAR 6/WP.6), the Sub-Committee reviewed, on a preliminary basis, the development of a procedure for recognition of mobile-satellite systems in the context of resolution A.888(21) - Criteria for the provision of mobile-satellite communication systems in the Global Maritime Distress and Safety System (GMDSS).

16.5 The Sub-Committee noted the view of the Working Group that one possible option could be to establish an independent Panel of Experts to consider proposed mobile-satellite communication systems and evaluate the nomination against the IMO criteria (resolution A.888(21)).

16.6 The Sub-Committee also discussed in some detail the following possible steps of a procedure for recognizing such mobile-satellite communication systems:

- .1 nomination of system by an Administration to the Organization in line with criteria set out in section 1 of the Annex to resolution A.888(21);
- .2 verification point by point of compliance with criteria or explanation of equivalent capabilities;
- .3 description of operational capability or operational trials;
- .4 evaluation of nomination by the Maritime Safety Committee; and
- .5 the MSC takes decision and approves an appropriate circular.

16.7 The Sub-Committee, recognizing that the development of a procedure for recognition of mobile-satellite systems including the process of evaluation within the Organization was still at a formative stage, invited Member Governments and interested organizations to submit relevant proposals to COMSAR 7 for consideration.

17 REVISION OF PERFORMANCE STANDARDS FOR NAVTEX EQUIPMENT

General

17.1 The Sub-Committee noted that, having discussed document MSC 73/18/3 (United Kingdom) (as further updated by document MSC 74/21/13, paragraphs 5 to 8), proposing that a revision of the performance standards for NAVTEX equipment should be undertaken to take account of the increasing volume of information conveyed by NAVTEX stations and the enhanced storage, processing and display possibilities offered by recent technological advances and to allow modern technology to be used to provide the mariner with maritime safety information (MSI), MSC 74 had decided to include, in the Sub-Committee's work programme, a low priority item on "Revision of the performance standards for NAVTEX equipment", with a target completion date of 2003 and the same item in the provisional agenda for COMSAR 6. The Sub-Committee was instructed, when revising the performance standards concerned, to take into account the proposals outlined in documents MSC 72/21/6 (France) and MSC 73/18/3.

17.2 The Sub-Committee referred document COMSAR 6/17 (United Kingdom) proposing preliminary draft revised performance standards for NAVTEX equipment and a relevant draft

MSC resolution to the Technical Working Group for consideration and reporting its deliberations to Plenary.

Report of the Technical Working Group (WG 2)

17.3 Having considered the report of the Working Group (COMSAR 6/WP.4), the Sub-Committee concurred with the Group's opinion that the performance standards should be updated and that, in addition to the points in document COMSAR 6/17, consideration should be given to include a mandatory data and printer interface and to specify message memory capacity.

17.4 The Sub-Committee noted that the Group could not finalize the proposal on revision of the performance standards and, therefore, invited Members to submit their comments and proposals to COMSAR 7 for consideration.

18 HARMONIZATION OF GMDSS REQUIREMENTS FOR RADIO INSTALLATIONS ON BOARD SOLAS SHIPS

18.1 The Sub-Committee recalled that MSC 71 had discussed document MSC 70/20/3 (Ireland) proposing to consider developing internationally agreed harmonized guidelines for GMDSS installation and had decided to include in the Sub-Committee's work programme a low priority item on "Harmonization of GMDSS requirements for radio installations on board SOLAS ships", with 2 sessions needed to complete the item.

As suggested by COMSAR 4, MSC 72 decided to include this agenda item to the provisional agenda for COMSAR 5. However, no submissions had been received at that session.

18.2 Having considered document COMSAR 6/18 (Ireland) suggesting items which could form a basis for discussion in the development of an internationally agreed set of guidelines for the installation of GMDSS radio equipment on board SOLAS ships, the Sub-Committee strongly supported the development of, and the need for, such guidelines and invited the Committee to extend the target completion date for the agenda item "Harmonization of GMDSS requirements for radio installations on board SOLAS ships" to 2003.

18.3 Member Governments and, in particular Ireland, were invited to submit their proposals on the issue to COMSAR 7 for consideration.

18.4 The Sub-Committee noted COMSAR 6/INF.10 reflecting the opinion of Norway that the functional requirements of SOLAS regulation IV/4 were fulfilled even if a ship was not equipped with MF/HF direct-printing telegraphy and, being of the opinion that the matter was not as simple as initially anticipated, invited Norway to submit their proposal simultaneously to MSC 76 and COMSAR 7 for consideration, if authorized by the Committee.

19 WORK PROGRAMME AND AGENDA FOR COMSAR 7

Large passenger ships safety

19.1 The Sub-Committee noted that in considering Large passenger ships safety matters, MSC 74 had assigned various tasks to the FP, COMSAR, NAV, DE, SLF and STW Sub-Committees and, consequently, had included, in these Sub-Committees' work programme, a high priority item on "Large passenger ship safety", with a target completion date of 2003; and had included the same item in the provisional agendas for FP 46, COMSAR 6, NAV 48, DE 45, SLF 44 and STW 33.

Revision of the fishing vessel Safety Code and Voluntary Guidelines

19.2 The Sub-Committee also noted that, having considered the SLF 43's request to the FP, COMSAR, NAV, DE and STW Sub-Committees to review and prepare final texts of relevant chapters of the aforementioned draft revised Code and Guidelines, the Committee had agreed to include, in the work programmes of these Sub-Committees and in the provisional agendas for FP 46, COMSAR 6, NAV 48, DE 45 and STW 33, a high priority item on "Revision of the fishing vessel Safety Code and Voluntary Guidelines", with a target completion date of 2003.

Bulk carrier safety

19.3 The Sub-Committee noted further that, in considering Bulk carrier safety matters, MSC 74 had assigned various tasks to the COMSAR, NAV, DE and SLF Sub-Committees and, consequently, included, in these Sub-Committees' work programme, a high priority item on "Matters related to bulk carrier safety", with a target completion date of 2002; and included the same item in the provisional agendas for COMSAR 6, NAV 48, DE 45 and SLF 44.

New work programme items proposed by COMSAR 5

19.4 It was noted that, in endorsing relevant proposals of COMSAR 5, the Committee had considered documents MSC 74/21/10 and MSC 74/21/11 (France) and decided to include the following new items and sub-items, as appropriate, in the Sub-Committee's work programme:

- .1 "Developments in maritime radiocommunication systems and technology", with a target completion date of 2003;
- .2 "Bridge-to-bridge radiocommunications", with a target completion date of 2003;
- .3 "Places of refuge", under the co-ordination of the NAV Sub-Committee with a target completion date of 2002; and
- .4 "Development of a list of contents for a medical first-aid kit for certain ro-ro passenger ships for utilization by a medical doctor", with a target completion date of 2002.

Revision of NAVTEX receiver performance standards

19.5 The Sub-Committee noted further that, having discussed document MSC 73/18/3 (United Kingdom) (as further updated by document MSC 74/21/13, paragraphs 5 to 8) proposing that a revision of the performance standards for NAVTEX equipment should be undertaken to take account of the increasing volume of information conveyed by NAVTEX stations and the enhanced storage, processing and display possibilities offered by recent technological advances and to allow modern technology to be used to provide the mariner with maritime safety information (MSI), the Committee had decided to include, in the Sub-Committee's work programme, a low priority item on "Revision of the performance standards for NAVTEX equipment", with a target completion date of 2003 and the same item in the provisional agenda for COMSAR 6.

19.6 Taking into account the progress made at this session and the provisions of the agenda management procedure, the Sub-Committee revised its work programme (COMSAR 6/WP.10) based on that approved by MSC 74 (COMSAR 6/2, annex) and prepared a revised work

programme and provisional agenda for COMSAR 7, as set out in annex 18, for consideration and approval by the Committee. While reviewing the work programme, the Sub-Committee agreed to invite the Committee to:

- .1 delete the following work programme items as work on them has been completed:
 - .1.1 item 6.1 - Development of a list of contents for a medical first-aid kit for certain ro-ro passenger ships for utilization by a medical doctor;
 - .1.2 item H.2 - Development of criteria for general radiocommunications;
 - .1.3 item H.7 - Place of refuge;
 - .1.4 item H.9 - Revision of the fishing vessels Safety Code and Voluntary Guidelines; and
 - .1.5 item H.10 - Matters related to bulk carrier safety;
- .2 extend the target completion date of the following work programme items:
 - .2.1 item 6.1 - Harmonization of aeronautical and maritime search and rescue, including SAR training matters, to 2003;
 - .2.2 item 7 - Emergency radiocommunications: false alerts and interference to 2003, and replace ":" by the word ", including"; and
 - .2.3 item L.1 - Harmonization of GMDSS requirements for radio installations on board SOLAS ships, to 2003;
- .3 include the following new work programme item:
 - .3.1 item 6.4 - Medical assistance in SAR services, with a target completion date of 2003;
- .4 replace in item 6, the word "introduction" by the word "implementation";
- .5 replace the low priority by a high priority of the following work programme item:
 - .5.1 item L.2 - Revision of the performance standards for NAVTEX equipment; and
- .6 renumber the work programme items accordingly.

19.7 The delegation of the Bahamas expressed their concern that so many items of the Sub-Committee's work programme had continuous status.

Arrangements for the next session

19.8 Propose to establish at COMSAR 7 the following Working Groups on:

- .1 GMDSS operational matters;
- .2 SAR matters; and
- .3 technical matters.

Date of the next session

19.9 The Sub-Committee noted that its seventh session had been tentatively scheduled to be held from 13 to 17 January 2003.

Intersessional meetings

19.10 The Sub-Committee noted that the ninth session of the ICAO/IMO Joint Working Group on Harmonization of Aeronautical and Maritime Search and Rescue was scheduled to be held in Hong Kong, China from 30 September to 4 October 2002 and invited the Committee to approve this intersessional meeting.

20 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2003

In accordance with rule 16 of the Rules of Procedure of the Maritime Safety Committee, the Sub-Committee unanimously re-elected Mr. V. Bogdanov (Russian Federation), as Chairman and Mr. U. Hallberg (Sweden), as Vice-Chairman for 2003.

21 ANY OTHER BUSINESS**Outcome of the twenty-second session of the Assembly**

21.1 The Sub-Committee noted that the Assembly, at its twenty-second session, had unanimously adopted resolution A.924(22) - Review of measures and procedures to prevent acts of terrorism which threaten the security of passengers and crews and the safety of ships, which had been proposed by the Secretary-General in aftermath of the terrorist attacks in New York and Washington, D.C. on 11 September 2001 and had already been unanimously approved by the Council at its twenty-first extraordinary session.

The Assembly also decided, responding to a proposal by the United States' delegation, that, in order for action on the Assembly's requests in the resolution to be taken expeditiously, an intersessional working group should be established to prepare appropriate recommendations for submission to MSC 75 for any necessary follow-up action. The Assembly recalled that, among the measures the United States was considering, included:

- .1 reviewing the issues related to the installation of automatic identification systems (AIS) on ships;
- .2 considering the need for security plans on ships, port facilities and off-shore terminals;

- .3 reviewing the need for identification verification and background security checks for seafarers; and
- .4 ensuring a secure chain of custody for containers from their port of origin to their destination.

Following presentation of a possible expeditious course of action, the Secretariat explained that, while AIS matters could be considered within the context of the revised SOLAS chapter V, the port and ships' security plans issue could not be considered under any other SOLAS chapter, in which case it might be appropriate to have it dealt with by means of a possible amendment(s) to SOLAS chapter XI on Special measures to enhance maritime safety. If that chapter were to be amended, it could incorporate other maritime security measures proposed, in which case it might be appropriate to rename it "Special measures to enhance maritime safety **and security**". Naturally, any final decision as to which parts of SOLAS, STCW or other IMO Conventions should be amended would be a matter for MSC 75 to decide.

Committee 2 (the Technical Committee) of the Assembly agreed that the intersessional MSC Working Group on Maritime Security, should meet (against IMO costs, including interpretation costs, covered by the United States) at IMO Headquarters from 11 to 15 February 2002 to:

- .1 start work on the review requested in operative paragraph 1 of the resolution;
- .2 prepare a list of subjects to be further discussed which, according to their nature, should then be forwarded to the MSC and, if appropriate, the Legal and FAL Committees for further elaboration;
- .3 consider proposals and information on maritime security issues submitted by Member Governments and international organizations concerned;
- .4 prepare a work plan and timeframe for the work to be undertaken on this matter; and
- .5 submit its report to MSC 75.

Long-range AIS interface

21.2 The Sub-Committee also noted that the ISWG had considered a proposal by the United States on work for the practical use of a long range interface in shipborne AIS equipment and related proposals and information by Australia and the Russian Federation and agreed:

- .1 that the NAV and COMSAR Sub-Committees should be asked to start work on the means of the practical use of a long-range interface in shipborne AIS equipment;
- .2 subsequent to the concurrence of the MSC Chairman, COMSAR 6 was invited to initially consider this issue and to report to MSC 75 thereon, providing also information which other international organizations would have to be involved in that development; and
- .3 to invite MSC 75 to instruct NAV 48 to start work on this topic.

21.3 Having considered the report of the Operational Working Group (WG 3), the Sub-Committee took action as summarized hereunder.

21.4 The Sub-Committee noted the Working Group's opinion that Inmarsat-C could serve the needs of shipping as an interim measure only and that long-range AIS would be the most suitable option in the long term.

21.5 The delegation of Brazil reserved their position on that opinion, since it had considered that a system based on Inmarsat-C polling could achieve, with advantages, the purpose of long-range AIS in the short and in the long term. That delegation also expressed the intention to present a more detailed proposal on the issue for MSC 75.

21.6 The Sub-Committee instructed the Secretariat, subject to approval by MSC 75, to convey a request to ITU-R Working Party 8B and to Inmarsat Ltd through IMSO and invited Administrations to:

- .1 study the feasibility of providing long-range tracking with polling using the data output available from AIS equipment; Note: Provision of this capability should not impact on the technical or operational specifications of the AIS equipment; and
- .2 make necessary technical changes to MF/HF and Inmarsat equipment standards such that this AIS data may be available to any appropriate national Authority, which may include search and rescue Authorities, using GMDSS communication equipment.

21.7 Administrations were requested to study this capability and contribute to IMO, IMSO and ITU any results pertinent to adding this capability to GMDSS equipment.

21.8 The Sub-Committee also noted the information from a presentation made by POLE STAR describing one such commercial service to track ships using supplementary data through the Inmarsat D+ terminals. In order to utilize the full AIS data set (available external to AIS unit), technical interfaces and polling intervals need to be standardized. This could involve modifications to Recommendation ITU-Rec.493-10 for DSC equipment and a modification to the Inmarsat System Definition Manual for Inmarsat equipment.

21.9 The Committee was invited to note the Sub-Committee's outcome on the issue outlined in paragraphs 21.4 to 21.8 above.

PIRACY AND ARMED ROBBERY AGAINST SHIPS

MEANS OF SHIP ALERTING

21.10 The Sub-Committee recalled that, as required by MSC 72, COMSAR 5 had reviewed the standard ships' message formats for piracy attack alerts and was of the opinion that there was no need for any amendments; and had reported to MSC 74 accordingly.

MSC 74 endorsed COMSAR 5's position on the issue. MSC/Circ.623/Rev.2 was issued on 20 June 2001, revoking MSC/Circ.623/Rev.1.

21.11 The Sub-Committee recalled also that, in accordance with the instructions of the eighteenth Assembly, MSC 68 (28 May to 6 June 1997) had approved MSC/Circ.805 on

Guidance for the use of radio signals by ships under attack or threat of attack from pirates or armed robbers.

21.12 The Sub-Committee noted that at MSC 74 the observer of IMSO stated that the organization had sought means within its competence to support the international effort to combat piracy and armed robbery against ships. To this end, IMSO had requested Inmarsat Limited to review certain options for enhancing Inmarsat communication capabilities to provide more specific and direct support for vessels suffering attack by pirates. IMSO intended to bring the results of that review to the attention of COMSAR 6.

21.13 The Sub-Committee also noted that the ISWG had considered a proposal by the United States for the NAV and COMSAR Sub-Committees to be requested to consider means for providing a capability for seafarers to activate an alarm to notify authorities and other ships of a terrorist hijacking including a recommendation on whether such an alarm should be surreptitious.

The ISWG considered also a related proposal by the Marshall Islands (MSC 75/ISWG/5/1, paragraph 16) on the use of the GMDSS to broadcast a request for assistance and other proposals from the floor.

Subsequent to the concurrence of the MSC Chairman, COMSAR 6 and DE 45 were invited to consider the issue initially with priority and report to MSC 75 thereon.

21.14 Having considered COMSAR 6/6/3, section 4 (IMSO) and COMSAR 6/21, (Germany) the Sub-Committee revised the text of MSC/Circ.623/Rev.2 – Guidance to shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships, as follows:

.1 delete in paragraph 29 the following sentence: “The appropriate RCC should acknowledge receipt and attempt to establish communications”; and

.2 insert new paragraph 29*bis*:

“The ship may be able to send a covert piracy alert to an RCC. However, pirates may be on board the ship and within audible range of the communications equipment when the RCC sends an acknowledgement of receipt and attempts to establish communications. The pirates could, therefore, be alerted to the fact that a piracy alert had been transmitted. This knowledge may serve to further endanger the lives of the crew on board the ship. RCCs and others should, therefore, be aware of the dangers in alerting the pirates that a distress alert or other communication has been transmitted by the ship”.

21.15 The Committee was invited to approve MSC/Circ.623/Rev.3 with the above amendments.

21.16 The Sub-Committee requested the IMO/ICAO Joint Working Group on the Harmonization of Aeronautical and Maritime Search and Rescue to develop specific guidance to RCCs on the correct response to various types of distress alert from ships under attack by pirates. This guidance should cover the different cases of alerts received via any of the Inmarsat systems, DSC on different frequencies, etc.

Additional codes for nature of distress in the Inmarsat-E system

21.17 The Sub-Committee noted COMSAR 6/INF.6 (Germany) and determined that, until the MSC decides upon the recommended actions to be taken by MRCCs on receipt of a “piracy/terrorist attack” alert it was premature to reach a decision in relation to any additional nature of distress codes needed in the Inmarsat-E system. The Committee was invited to note the Sub-Committee's view on this matter.

PROPOSED REVISION OF THE FORM OF A NUCLEAR PASSENGER SHIP SAFETY CERTIFICATE AND THE FORM OF A NUCLEAR CARGO SHIP SAFETY CERTIFICATE

21.18 The Sub-Committee noted COMSAR 6/21/1 (Russian Federation) suggesting to review the Form of Nuclear Passenger Ship Safety Certificate and the Form of Nuclear Cargo Ship Safety Certificate and, being informed that the Russian Federation had submitted the similar proposal to MSC 75 by document MSC 75/22/7, supported the proposal and invited the Committee to authorize COMSAR 7 accordingly.

CONNECTION OF AIS TO THE RADIO STATION'S RESERVE POWER SOURCE

21.19 The Sub-Committee noted COMSAR 6/INF.7 (Germany) suggesting that AIS required by new SOLAS chapter V should be connected to the radio station's reserve power source(s). Recognizing the value of AIS use in many applications, the Sub-Committee was of the opinion that a connection of additional equipment to the radio station's reserve power source(s) might require a change in SOLAS regulations IV/13.2 and 13.8.

21.20 The Sub-Committee agreed that the matter should be considered further and invited Germany to submit simultaneously the appropriate proposal to MSC 76 and COMSAR 7 for consideration, subject to the Committee's authorization.

22 ACTION REQUESTED OF THE COMMITTEE

22.1 The Committee, at its seventy-fifth session is invited to:

- .1 agree to consider the draft MSC circular on Amendments to the International SafetyNET Manual at its seventy-sixth session for approval (paragraph 3.23 and annex 2*);
- .2 approve the draft MSC circular on Guidelines for general radiocommunications (paragraph 4.7 and annex 3);
- .3 approve the draft revised Assembly resolution on Proper use of VHF channels at sea, subject to comments/amendments which may be provided by the NAV and STW Sub-Committees, for submission to the twenty-third session of the Assembly for adoption (paragraph 4.10 and annex 4);
- .4 endorse the Sub-Committee's action in instructing the Secretariat to convey the liaison statement concerning amendments to Recommendation ITU-R M.493-10 to the ITU WP.8B (paragraph 5.7 and annex 5);

* All references are to paragraphs of, and annexes to, the report of COMSAR 6 (document COMSAR 6/22)

- .5 approve the draft IMO position on the World Radiocommunication Conference 2003 (WRC-03) agenda items concerning matters related to maritime services, for submission first to the Conference Preparatory Meeting (to be held in November 2002) and subsequently to WRC-03 (paragraph 5.15 and annex 6);
- .6 adopt the draft MSC resolution on Maritime safety and safety-related radiocommunications (paragraph 5.16 and annex 7);
- .7 approve the draft IMO statement on IMO's participation in future ITU World Radiocommunication Conferences, including the draft circular letter inviting Maritime Administrations to support the IMO views during such conferences, for submission to the ITU Plenipotentiary Conference (to be held in September/October 2002) (paragraph 5.17 and annex 8);
- .8 endorse the Sub-Committee's action in instructing the Secretariat to insert the agreed footnotes into the appropriate annexes to resolutions A.804(19) and A.806(19) concerning performance standards for shipborne radiocommunications and navigational equipment (paragraph 5.19);
- .9 adopt the draft MSC resolution on Performance standards for Inmarsat ship earth stations capable of two-way communications (paragraph 6.15 and annex 9);
- .10 concur with the Sub-Committee's view that Inmarsat Fleet F 77 communication terminals should be used on GMDSS ships and by MRCCs (paragraph 6.16);
- .11 approve the draft MSC circular on Guidelines for shore-based maintenance of satellite EPIRBs (paragraph 7.7 and annex 10);
- .12 approve the draft MSC circular on Guidelines on annual testing of 406 MHz satellite EPIRBs (paragraph 7.7 and annex 11);
- .13 note the Sub-Committee's decision to extend the work of the correspondence group on false alerts to 2003, subject to the Committee extending likewise the target completion date of the high priority item "Emergency radiocommunications: false alerts and interference" (paragraph 7.16);
- .14 approve the draft COMSAR circular on Guidance for voluntary use of standardized questionnaire and formats for reporting false alerts in collecting data on false alerts, prepared by the Secretariat in compliance with the Sub-Committee's instruction, (paragraph 7.18 and MSC 75/11/6);
- .15 approve the convening of the ninth session of the Joint ICAO/IMO Working Group on Harmonization of Aeronautical and Maritime SAR scheduled to take place in Hong Kong, China, from 30 September to 4 October 2002 (paragraphs 8.10 and 19.10);
- .16 approve the draft MSC circular on Guidelines for ship operators and search and rescue (SAR) services on minimum requirements for SAR data providers holding SAR co-operation plans in accordance with SOLAS regulation V/7.3 and MSC/Circ.1000 and the provision of up-to-date plans at all times (paragraph 8.32 and annex 12);

- .17 note the Sub-Committee's view that there was no need for establishing reporting requirements for passenger ships in addition to those contained in MSC/Circ.1000, paragraph 7 (paragraphs 8.35 and 8.36);
- .18 approve the draft MSC circular on the List of contents of the "Emergency Medical kit/bag" and medical consideration for use on ro-ro passenger ships not normally carrying a medical doctor (paragraph 8.53 and annex 13);
- .19 note the establishment of a correspondence group to assess responsibility and liability in relation to issues associated with the use of the "emergency medical kit/bag", subject to the Committee including a new high priority item on "Medical assistance in SAR services" in the Sub-Committee's work programme (paragraph 8.54);
- .20 endorse the Sub-Committee's recommendation that the existing SOLAS regulation IV/12.3 concerning watchkeeping on VHF channel 16 should not be changed (paragraph 9.5.1);
- .21 adopt the draft MSC resolution on Maintenance of a continuous listening watch on VHF channel 16 by SOLAS ships whilst at sea and installation of VHF DSC facilities on non-SOLAS ships, revoking resolution MSC.77(69) (paragraph 9.6 and annex 15);
- .22 instruct NAV 48 accordingly to take account of MSC/Circ.892 on Alerting of SAR Authorities when discussing place of refuge matters and inform COMSAR 7 (paragraph 10.8);
- .23 instruct the DE Sub-Committee to consider that the transportation safety lock mechanism of the escape chute, if not removed, may delay its opening (paragraphs 11.13.1 and 11.14.1);
- .24 instruct the STW Sub-Committee to consider the recommendation that a ship's crew assigned to carry injured persons to a rescue helicopter should be safety conscious and trained when working in the vicinity of the helicopter (paragraphs 11.13.3 and 11.14.2);
- .25 approve the draft MSC circular on Guidance on ships' daily reporting of their positions to their companies (paragraph 13.5 and annex 16);
- .26 adopt the proposed draft amendments to the IAMSAR Manual; and approve the associated draft MSC circular (paragraph 15.4 and annex 17);
- .27 instruct the Secretariat to request ITU-R WP.8B and Inmarsat Ltd. through IMSO to:
 - .1 study the feasibility of providing long-range tracking with polling using the data output available from AIS equipment; and
 - .2 make necessary technical changes to MF/HF and Inmarsat equipment standards such that the relevant AIS data may be available to any appropriate national authority, including SAR authorities, using GMDSS communication equipment (paragraph 21.6);

- .28 approve the draft revised MSC/Circ.623/Rev.2 on Guidance to shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships (paragraphs 21.14 and 21.15);
- .29 authorize COMSAR 7 to review the Form of Nuclear Passenger Ship Safety Certificate and the Form of Nuclear Cargo Ship Safety Certificate, as proposed in document MSC 75/22/7 (paragraph 21.18); and
- .30 approve the report in general.

22.2 In reviewing the work programme of the Sub-Committee, the Committee is invited to consider the revised work programme suggested by the Sub-Committee (annex 18) in general and, in particular, to:

- .1 delete the item "Development of criteria for general radiocommunications", as the work has been completed (paragraph 4.7);
- .2 delete the sub-item "Development of a list of contents for a medical first-aid kit for certain ro-ro passenger ships for utilization by a medical doctor, as the work has been completed (paragraphs 8.53 and 19.6.1.1);
- .3 delete the item "Place of refuge", as the work has been completed (paragraph 10.9);
- .4 delete the item "Revision of the fishing vessels Safety Code and Voluntary Guidelines", as the work has been completed (paragraph 12.11);
- .5 delete the item "Matters related to bulk carrier safety", as the work has been completed (paragraph 13.6);
- .6 extend the target completion date of the item "Emergency radiocommunications: false alerts and interference" to 2003, replacing ":" by the word ", including" (paragraph 7.8);
- .7 extend the target completion date of the item "Harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters" to 2003 (paragraphs 8.1 to 8.13);
- .8 extend the target completion date of the item "Harmonization of GMDSS requirements for radio installations on board SOLAS ships" to 2003 (paragraph 18.2);
- .9 include in the work programme of the Sub-Committee and the provisional agenda for COMSAR 7, a new high priority sub-item "Medical assistance in SAR services" under the existing item "Matters concerning search and rescue, including those related to the 1979 SAR Conference and the introduction of the GMDSS" with one session to complete (paragraphs 8.54 to 8.57);
- .10 replace in the item "Matters concerning search and rescue, including those related to the 1979 SAR Conference and the introduction of the GMDSS" the word "introduction" by the word "implementation" (paragraph 19.6.4); and

- .11 replace the low priority by a high priority of the item "Revision of the performance standards for NAVTEX equipment" (paragraph 19.6.5).

22.3 The Committee is also invited to approve the proposed provisional agenda for the Sub-Committee's seventh session (annex 18), which has been developed using the agenda management procedure.

ANNEX 1

AGENDA FOR THE FIFTH SESSION AND LIST OF DOCUMENTS

1 Adoption of the agenda

| | | |
|--------------|-------------|--|
| COMSAR 6/1 | Secretariat | Provisional agenda for the sixth session |
| COMSAR 6/1/1 | Secretariat | Annotations to the provisional agenda |

2 Decisions of other IMO bodies

| | | |
|--------------|-------------|--|
| COMSAR 6/2 | Secretariat | Decisions of the MSC 74 and NAV 47 |
| COMSAR 6/2/1 | Secretariat | Decisions of A 22 and the first extraordinary session of the MSC |
| COMSAR 6/2/2 | Secretariat | Decisions of MSC Working Group on Maritime Security |

3 Global Maritime Distress and Safety System (GMDSS)

| | | |
|----------------|--|--|
| COMSAR 6/3 | Russian Federation | Operational and technical co-ordination provisions of MSI services on NAV/METAREAs northward of the Arctic coast of the Russian Federation |
| COMSAR 6/3/1 | Chairman, International SafetyNET Broadcast Co-ordinating Panel | Proposed draft amendments to the International SafetyNET Manual |
| COMSAR 6/3/2 | Russian Federation | Proposed draft amendments to the International SafetyNET Manual |
| COMSAR 6/INF.2 | Canada | Final report of the 1 st North Sea-North Atlantic Co-ordinating Conference on Maritime Radiocommunications (NS-SA CCMR) |
| COMSAR 6/INF.4 | Chairman, International NAVTEX Co-ordinating Panel | International NAVTEX Service |
| COMSAR 6/WP.6 | | Report of the Operational Working Group |

4 Development of criteria for general radiocommunications

| | | |
|---------------|-------------|---|
| COMSAR 6/4 | Netherlands | Revision of resolution A.474(XII) on Proper use of VHF channels |
| MSC 74/9/3 | Netherlands | Revision of resolution A.474(XII) on Proper use of VHF channels |
| COMSAR 6/WP.6 | | Report of the Operational Working Group |

5 ITU maritime radiocommunication matters

| | | |
|-------------------------------------|--------------------|---|
| COMSAR 6/5 | Russian Federation | Maritime issues before WRC-03 |
| COMSAR 6/5/2 | Secretariat | Outcome of MSC 74 and NAV 47 |
| COMSAR 6/5/1 | United States | Maritime issues before WRC-03 |
| COMSAR 6/5/2 | Secretariat | Liaison statement from WP 8B to IMO concerning a draft revision of Recommendation ITU-R M.493-10 |
| COMSAR 6/5/3 and COMSAR 6/5/3/Add.1 | Secretariat | Report of the correspondence group on ITU WRC matters |
| COMSAR 6/5/4 | United States | Comment on document COMSAR 6/5/2 – Liaison statement from WP 8B to IMO concerning the draft revision of Recommendation ITU-R M.493-10 |
| COMSAR 6/INF.3 | Secretariat | Draft revision of Recommendation ITU-R M.493-10 |
| COMSAR 6/WP.4 | | Report of the Technical Working Group |

6 Satellite services (Inmarsat and COSPAS-SARSAT)

| | | |
|--------------|--------------------------|---|
| COMSAR 6/6 | France and COSPAS-SARSAT | On-board inspection and shore-based maintenance of satellite EPIRBs |
| COMSAR 6/6/1 | COSPAS-SARSAT | Status of the COSPAS-SARSAT Programme |

| | | |
|---------------------|---|---|
| COMSAR 6/6/2 | COSPAS-SARSAT | Discrepancies between IMO GMDSS Master Plan and COSPAS-SARSAT Information on 406 MHz Beacon Registries |
| COMSAR 6/6/2/Corr.1 | Secretariat | Discrepancies between IMO GMDSS Master Plan and COSPAS-SARSAT Information on 406 MHz Beacon Registries – Corrigendum |
| COMSAR 6/6/3 | IMSO | Analysis and assessment of the GMDSS performance of Inmarsat Ltd. |
| COMSAR 6/INF.5 | IMSO | Information concerning new maritime mobile-satellite communication terminal equipment being introduced by Inmarsat Ltd. |
| COMSAR 6/WP.7 | | Report of the <i>Ad-Hoc</i> Drafting Group |
| 7 | Emergency radiocommunications: false alerts and interference | |
| COMSAR 6/7 | COSPAS-SARSAT | Interference in the 406.0 – 406.1 MHz Frequency Band |
| COMSAR 6/7/1 | Finland | Discussion points towards draft guidelines for shore-based maintenance of satellite EPIRBs and ancillary devices |
| COMSAR 6/7/2 | United States | Proposed expansion of terms of reference for the correspondence group on false alerts |
| COMSAR 6/7/3 | Norway | Periodic shore-based maintenance of satellite EPIRBs |
| COMSAR 6/7/4 | Norway | Report of the correspondence group on false alerts |
| COMSAR 6/7/4/Add.1 | Norway | Standardized questionnaires for reporting false alerts |
| COMSAR 6/7/4/Add.2 | Norway | Standardized formats for reporting false alerts |
| COMSAR 6/INF.12 | Norway | How to maintain the GMDSS competence |

| | | |
|---|----------------------------|--|
| COMSAR 6/WP.4 COMSAR 6/WP.4/Add.1 | | Report of the Technical Working Group |
| COMSAR 6/WP.6 | | Report of the Operational Working Group |
| 8 Matters concerning search and rescue, including those related to the 1979 SAR Conference and the introduction of the GMDSS | | |
| COMSAR 6/8 and COMSAR 6/8/Add.1 | Secretariat | Report of the 8 th ICAO/IMO Joint Working Group on Harmonization of Aeronautical and Maritime SAR |
| COMSAR 6/8/1 | Canada | Impact on GMDSS distress alerting due to the discontinuance of the telex |
| COMSAR 6/8/2 | Australia | Report of an Asia-Pacific Regional Search and Rescue Conference Held in Cairns, Australia, 13 to 16 August 2001 |
| COMSAR 6/8/3 | Secretariat | Need for updating model training courses on maritime search and rescue |
| COMSAR 6/8/4 | France | Revision of COMSAR/Circ.18 – Guidance on minimum communication needs for maritime rescue co-ordination centres |
| COMSAR 6/8/5 (French and Spanish) | France | Review of safety measures and procedures for the treatment of persons rescued at sea |
| COMSAR 6/8/5/Rev.1 (English) | France | Review of safety measures and procedures for the treatment of persons rescued at sea |
| COMSAR 6/8/6 | United Kingdom and ICCL | Minimum requirements for SAR Data Providers holding SAR Co-operation Plans in accordance with SOLAS regulation V/7.3 and MSC/Circ.1000 |
| COMSAR 6/8/7 | United Kingdom and ICCL | Maintaining up-to-date SAR Co-operation Plans in accordance with SOLAS regulation V/7.3 and MSC/Circ.1000 |

| | | |
|---|---|---|
| COMSAR 6/8/8 | Norway | A possible impact on GMDSS distress alerting due to the termination of ARQ telex |
| COMSAR 6/8/9 | Germany | Development of a list of contents for a medical first-aid kit for certain ro-ro passenger ships for utilization by a medical doctor |
| COMSAR 6/INF.8 | Hong Kong, China | Voluntary doctors on board helicopter during medical evacuation |
| COMSAR 6/WP.6 | | Report of the Operational Working Group |
| COMSAR 6/WP.9 | | Report of the SAR Working Group |
| 9 Bridge-to-bridge radiocommunications | | |
| COMSAR 6/9 | United States | Watchkeeping on channel 16 VHF-FM by SOLAS ships |
| COMSAR 6/9/1 | Denmark, Finland, France, Germany, Ireland, Sweden and United Kingdom | Listening watch on VHF channel 16 |
| COMSAR 6/9/2 | ILF and ISAF | Watchkeeping on VHF channel 16 |
| COMSAR 6/9/3 | Norway | Use of VHF channel 16 after 1 February 2005 |
| MSC 74/9/5 | Denmark and Netherlands | Proposed amendments to SOLAS regulation IV/12.3 |
| COMSAR 6/WP.5 | | Report of the Drafting Group of Plenary |
| 10 Place of refuge | | |
| No documents submitted | | |
| COMSAR 6/WP.9 | | Report of the SAR Working Group |
| 11 Large passenger ship safety | | |
| COMSAR 6/11 | Secretariat | Outcome of MSC 74 |

| | | |
|---|-------------------------|---|
| COMSAR 6/11/1 | United Kingdom and ICCL | Passenger ships reporting arrival and stay in SAR regions |
| COMSAR 6/11/2 | Hong Kong, China | Lessons learned from Search and Rescue Exercise |
| COMSAR 6/11/3 | United States | Large passenger ship safety |
| COMSAR 6/INF.9 | United States | Large passenger ship safety |
| COMSAR 6/WP.4 | | Report of the Technical Working Group |
| COMSAR 6/WP.9 | | Report of the SAR Working Group |
| 12 Review of the fishing vessel safety code and voluntary guidelines | | |
| COMSAR 6/12 | Secretariat | Revision of the fishing vessel Safety Code and Voluntary Guidelines – Outcome of SLF 44 |
| COMSAR 6/WP.3 | | Report of the Drafting Group |
| 13 Matters related to bulk carrier safety | | |
| No documents submitted | | |
| COMSAR 6/WP.8 | | Report of the <i>Ad-Hoc</i> Drafting Group of Plenary |
| 14 Development in maritime radiocommunication systems and technology | | |
| COMSAR 6/INF.11 | Norway | Short-range radio devices |
| COMSAR 6/WP.4 | | Report of the Technical Working Group |
| 15 Revision of the IAMSAR Manual | | |
| COMSAR 6/15 | Russian Federation | Proposed amendments to the IAMSAR Manual, Volume III |
| COMSAR 6/15/1 | ILF and ISAF | Proposed small vessel version of the IAMSAR Manual, Volume III |

| | | |
|----------------|--------------------|---|
| COMSAR 6/21/1 | Russian Federation | Proposal on the revision of the Form of Nuclear Passenger Ship Safety Certificate and the Form of Nuclear Cargo Ship Safety Certificate |
| COMSAR 6/INF.6 | Germany | Additional codes for nature of distress in the Inmarsat-E system |
| COMSAR 6/INF.7 | Germany | Connection of AIS to the radio station's power source |
| COMSAR 6/WP.1 | | Long-range AIS and Inmarsat-C (MSC 75/ISWG/J/12) |
| COMSAR 6/WP.2 | | Proposal of a system for global identification and tracking of ships |
| COMSAR 6/WP.7 | | Report of the <i>Ad-Hoc</i> Drafting Group |

22 Report to the Maritime Safety Committee

| | |
|--|---|
| COMSAR 6/WP.11 COMSAR 6/WP.11/Add/1 | Draft Report to the Maritime Safety Committee |
|--|---|

ANNEX 2

DRAFT MSC CIRCULAR

International SafetyNET Manual

1 The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its sixth session (18 to 22 February 2002), approved a number of amendments to the International SafetyNET Manual.

2 These amendments which are based on operational experience gained by the NAVAREA/METAREA Co-ordinators, the Search and Rescue Facilities and feedback to the International SafetyNET Co-ordinating Panel are given at annex.

3 Member Governments are invited to bring these amendments to the attention of their relevant maritime Administrations, for information and action, as appropriate.

ANNEX 1

- 1 The amendments are given below as follows;
 - .1 throughout the publication amend the "International Maritime Satellite Organization" to read "International Mobile Satellite Organization (IMSO)";
 - .2 throughout the publication amend "International SafetyNET Broadcast Co-ordinating Panel" to read "International SafetyNET Co-ordinating Panel";
 - .3 throughout the publication where appearing, amend "CESs" to read "LESs";
 - .4 page iii, paragraph 2, fourth line, amend to read "...at Sea (SOLAS), 1974, as amended, as a requirement.....";
 - .5 page iii, first footnote, and page 1, amend to read "SafetyNET™ and FleetNET™ are registered trademarks of the International Mobile Satellite Organization";
 - .6 page iv, add following text, Acknowledgement - Figures 1 - 5 are extracted from the Admiralty List of Radio Signals, Volume 5, with the permission of the United Kingdom Hydrographic Office;
 - .7 page vi, delete Annex 6 and renumber the remaining Annexes;
 - .8 page 1, paragraph 1.6, third line, amend to read "...via an Inmarsat-C land earth station.";
 - .9 page 1, paragraph 1.6, last line, delete (see annex 6, paragraph 1.3.1);
 - .10 Figure 1, second line, amend block to read "INMARSAT LAND EARTH STATIONS";
 - .11 page 4, delete paragraph 2.1 and insert the following text:
 - 2.1 **Land Earth Station (LES):** A land station in the Inmarsat satellite communications system which provides interconnection between the satellite and shore systems such as telex and telephone;
 - .12 page 7, Figure 3, amend title to read "NAVAREAs/METAREAs WITH INMARSAT GLOBAL COVERAGE";
 - .13 page 11, paragraph 5.3, third line, delete (see annex 6);
 - .14 page 13, paragraph 7, rename, "**Land Earth Station functions**";
 - .15 page 13, paragraph 7.2, 3rd line, delete the words "in Annex 6";
 - .16 page 14, paragraphs 9.4.1, 9.6, 9.7, last line, amend to read "... Distress and Safety System, as amended.";

- .17 page 17, (Annex 1), paragraph 1, delete 3rd bullet;
- .18 page 17, (Annex 1), old fourth bullet, amend to read "Advise land earth station (LES) operators";
- .19 page 17, (Annex 1), paragraph 2, change 1st line of address to read, "International SafetyNET Co-ordinating Panel" and change phone numbers to:
- Telephone: +44 (0)207 735 7611
Telex: 23588 IMOLDN G
Telefax: +44 (0)207 587 3210
E-mail: info@imo.org
- .20 page 20, (Annex 2), Footnote, delete "see Annex 6, section 1.3.3(c);
- .21 Annex 3, delete existing text and replace with following text:

“Annex 3

The Inmarsat system

- 1** There are three essential components of the Inmarsat system:
- the Inmarsat space segment - the satellites and their ground support facilities - planned and funded by Inmarsat;
 - the Land Earth Stations (LESs) which provide an interface between the space segment and the national and international fixed telecommunications networks and which are generally funded and operated by the LES Operators who are Inmarsat Shareholders and distribute Inmarsat services; and
 - the Ship Earth Stations (SESs) - the satellite communications terminals which are purchased or leased by individual ship owners/operators.
- 2** Shore-to-ship communications are in the 6 GHz band (C-band) from the LES to the satellite and in the 1.5 GHz band (L-band) from satellite to ship. Ship-to-shore communications are in the 1.6 GHz band from the ship to the satellite and in the 4 GHz band (C-band) from satellite to LES.
- 3 The space segment**
- 3.1** To provide its space segment for global coverage, Inmarsat employs its own dedicated satellites.
- 3.2** This space segment is segmented globally into four regions: Atlantic Ocean Region East (AOR-E), Atlantic Ocean Region West (AOR-W), Indian Ocean Region (IOR), and Pacific Ocean Region (POR). Each ocean region is served by a dedicated satellite. Inmarsat has full contingency plan in place in the event of any satellite outage. These contingency plans are examined regularly and are witnessed by International Mobile Satellite Organisation (IMSO). The high polar regions cannot be seen by geostationary satellites (figure 3).

3.3 The Inmarsat Network Operations Centre (NOC) in the United Kingdom functions around the clock, co-ordinating the activities of the Network Co-ordination Stations (NCSs) and the LESs in each ocean region.

4 Land Earth Stations

The Inmarsat system is connected into the world-wide telecommunications networks via LESs. Many of these LESs provide Inmarsat-C EGC services. The wide spread of LESs around the world offers flexibility and the prospect of shorter landlines to access the desired LES.

5 Ship Earth Stations

5.1 Inmarsat-C EGC SESs are small, lightweight terminals, with small omnidirectional antennas, for providing message-type services. EGC receive capability is provided by Class 2 or 3 Inmarsat-C SESs. Interfaces via RS232 ports are provided for a personal computer or any other data terminal equipment for message generation and display. The antenna is small and light enough to be installed on any ship or boat.

5.2 Class 0 standalone EGC receivers provide the capability to receive SafetyNET and FleetNET messages only; there is no transmit capability for sending outgoing messages. The EGC antenna is identical to an Inmarsat-C antenna.

5.3 The technical requirements of all classes of equipment are found in the Annex 6 of the present publication.”

.22 page 24, (Annex 4), paragraph 3, first sub-paragraph, amend to read "... depending on the land earth station";

.23 page 24, (Annex 4), paragraph 3, second sub-paragraph, amend second line to read "...value according to the options specified in the following sections.";

.24 page 25, (Annex 4), insert a new paragraph 7 as follows:

7 For all the services provided below, a cancellation facility is provided for messages transmitted to a LES with category (b) repetition codes (see section c, paragraph 3.4.3.2). The CANCEL instruction takes the form:

CANCEL [*message reference number*] AT [*date/time*]

where the message reference number is the number given to the message provider by the LES on receipt of the initial message and the date/time is in the form DDHHMMZ MoMoMo YY.

For example:

CANCEL [*message reference number*] AT 211430UTC FEB 90

For example:

C₁: C₂: C₃: C₄: C₅

[*text*]

NNNN

CANCEL [*message reference number*] AT [*date/time group*]

Notes

- 1 Only the "text" is for transmission.
- 2 When included with a message for broadcasting, the LES message cancellation instructions will appear after the NNNN. There will be only one instruction to each line, but the facility to provide for more than one line of instructions is desirable.
- 3 If the cancellation instruction terminates after the message reference number, i.e. the *[date/time group]* is not included - then the instruction should be executed immediately.
- 4 It should also be possible for a CANCEL instruction to be sent to the LES's store and forward unit.

- .25 page 25, (Annex 4), Section a, paragraph 1, add new text as follows "... the International SafetyNET Service. Broadcasts originated by the International Ice Patrol also follow the guidelines in this section.";
- .26 page 26, (Annex 4), Section a, paragraph 3.3, second column, COASTAL WARNINGS, delete "as specified in paragraph 1.3.3(c) of Annex 6.";
- .27 page 29, (Annex 4), Section b, paragraph 3.3, top of page, second column, delete the following text "as specified in paragraph 1.3.3(c) of Annex 6";
- .28 page 30, (Annex 4), Section c, paragraph 1, amend last line to read "... and Rescue, 1979, and the IAMSAR Manual;
- .29 page 31, (Annex 4), Section c, paragraph 3.1, delete the text after $C_1 = 3$ (distress);
- .30 page 31, (Annex 4), Section c, insert new paragraphs as follows:

3.4.1 The following repetition codes may be available at some Land Earth Stations (LESs) and may exceptionally be used for search and rescue broadcasts.

3.4.2 *Repetition codes (C_4)*

The C_4 repetition codes are divided into two categories:

- (a) for messages that are required to be repeated a finite number of times; and
- (b) for messages that are required to be repeated at specified intervals until cancelled by the information provider.

3.4.2.1 *Category (a) repetition codes*

- | | |
|----|--|
| 01 | transmit once on receipt |
| 11 | transmit on receipt followed by repeat 6 minutes later |
| 61 | transmit 1 hour after initial broadcast (twice) |

- 62 transmit 2 hours after initial broadcast (twice)
- 63 transmit 3 hours after initial broadcast (twice)
- 64 transmit 4 hours after initial broadcast (twice)
- 66 transmit 12 hours after initial broadcast (twice)
- 67 transmit 24 hours after initial broadcast (twice)
- 70 transmit 12 hours after initial broadcast then 12 hours after the second broadcast (three times).
- 71 transmit 24 hours after initial broadcast then 24 hours after the second broadcast (three times).

Note: LES operators may offer other codes.

3.4.2.2 Category (b) repetition codes

A category (b) repetition code allows a message to be repeated indefinitely or until cancelled by the message provider. The repetition period can be set at between 1 and 120 hours. In addition, each transmission can be echoed after a fixed period of 6 minutes.

The repetition codes are of the form:

Multiplier x Delay

where the multiplier specifies the number of delay periods between each broadcast and the delay is a fixed number of hours.

The multiplier digit may be any digit from 1 to 5 as follows:

Multiplier

- 1 1 specified delay period between broadcasts
- 2 2 specified delay periods between broadcasts
- 3 3 specified delay periods between broadcasts
- 4 4 specified delay periods between broadcasts
- 5 5 specified delay periods between broadcasts

The delay digit coding is as follows:

Delay

- 2 1 hour delay; no echo
- 3 1 hour delay; with echo
- 4 6 hour delay; no echo
- 5 6 hour delay; with echo
- 6 12 hour delay; no echo
- 7 12 hour delay; with echo
- 8 24 hour delay-, no echo
- 9 24 hour delay; with echo

The various combinations are shown in the table below:

| Delay | Multiplier | | | | | Echo |
|-------|------------|----|----|----|-----|------|
| | 1 | 2 | 3 | 4 | 5 | |
| 2 | 1 | 2 | 3 | 4 | 5 | No |
| 3 | 1 | 2 | 3 | 4 | 5 | Yes |
| 4 | 6 | 12 | 18 | 24 | 30 | No |
| 5 | 6 | 12 | 18 | 24 | 30 | Yes |
| 6 | 12 | 24 | 36 | 48 | 60 | No |
| 7 | 12 | 24 | 36 | 48 | 60 | Yes |
| 8 | 24 | 48 | 72 | 96 | 120 | No |
| 9 | 24 | 48 | 72 | 96 | 120 | Yes |

Examples:

- 1 Code 19 means "repeat broadcast every 24 hours with an echo 6 minutes after each broadcast".
- 2 Code 38 means "repeat broadcast every 72 hours with no echo".
- .31 page 32, (Annex 4), Section c, paragraph 3.7, third line, delete all text in parenthesis.
- .32 page 32, (Annex 4), Section c, add new section 4 as follows and renumber remaining sections:

Search and Rescue Co-ordination traffic

4 Search and Rescue Co-ordination messages should be addressed to circular or rectangular areas for the intent of co-ordinating the search and rescue of a vessel in distress. Priority of the message will be determined by the phase of the emergency.

4.1.1 C₁ – Message Priority

C₁ = 3(distress), 2(urgent), or (1) safety

4.1.2 C₂ – Service Code

Search and Rescue co-ordination to rectangular area C₂ = 34
Search and Rescue co-ordination to circular area C₂ = 44

4.1.3 C₃ – Address Code

Search and Rescue co-ordination to rectangular area (C₂ = 34) C₃ = 12 characters

Rectangular addresses will consist of 12 characters as follows:

D₁D₂LaD₃D₄D₅LoD₆D₇D₈D₉D₁₀

where: $D_1 D_2$ is latitude of south-west corner of the rectangle in degrees.

L_a is hemisphere N or S.

$D_3 D_4 D_5$ is longitude of southwest corner of rectangle in degrees, with leading zeros if required.

L_o is longitude E or W.

$D_6 D_7$ is extent of rectangle in latitude (degrees).

$D_8 D_9 D_{10}$ is extent of rectangle in longitude (degrees).

A rectangle whose south-west corner is 12° S and 124° E, extending 10° north and 10° east, is coded as:

12S124E10010

Note: Latitude and longitude are limited by values from 00° to 90° latitude and 000° to 180° longitude.

Search and Rescue co-ordination to circular area ($C_2 = 44$)
See Section 3 for description of circular addressing

$C_3 = 10$ characters

4.1.4 C_4 – Repetition code

$C_4 = 11$ (transmit on receipt followed by automatic repeat 6 minutes later)

4.1.5 C_5 – Presentation code

Always $C_5 = 00$, International alphabet number 5.

.33 page 32, new paragraph 5.1 (old 4.1), amend to read “ $C_1 = 2$ (urgency) or 1 (safety)”

.34 page 33, (Annex 4), Section d, third line, delete “(July 1993)”

.35 page 37, (Annex 5), paragraph 2, amend to read “... Organization, IMSO, and the World Meteorological amendments.”

.36 page 37, (Annex 5), paragraph 3, last line, amend to read “ on Radiocommunications and Search and Rescue with tasks.”

.37 page 38, delete current Annex 6 and insert the document at Annex 2 as the new Annex 6, (rewrite of current Annex 7), renumber remaining annexes

.38 page 48, amend figure number to 6-1

.39 page 49, delete Class 0 (Option 2, etc.) - no longer in the SDM

.40 page 49, amend to read "Figure 6-2 - EGC Receiver Option

- .41 page 64, Sample Certificate, Change phone numbers for both organizations as follows:

IMO

Telephone
National 020 7735 7611
International +44 (0)20 7735 7611
Facsimile +44 (0)20 7587 3210
Telex 23588 IMOLDN G

Inmarsat

Telephone:
National 020 7728 1000
International +44 (0)20 7728 1000
Facsimile +44 (0)20 7728 1044
Telex 297201 INMSAT G

ANNEX 2

Annex 6
EGC receiver specifications

These technical requirements were prepared by Inmarsat for equipment manufacturers and have been extracted from the System Definition Manual (SDM) for the Inmarsat-C communications system.

Enhanced Group Call (EGC) receive facilities will be used by SOLAS Convention ships as well as ships not required to comply with the requirements of the SOLAS Convention, as amended. It should be noted that EGC receive facilities intended to meet 1974 SOLAS Convention requirements must comply with the IMO Performance Standards contained in the Annex [] of the present publication.

The specific guidance given in this Annex has been carefully co-ordinated to ensure that the automatic functions of the SafetyNET receiver work properly and in a predictable way when combined with the automatic functions of the Land Earth Station. Land Earth Stations providing Inmarsat C services for the GMDSS must comply with all relevant aspects of the Inmarsat C SDM, including the provision of all SafetyNET message addressing facilities and options.

**Technical requirements for
Enhanced Group Call Receiver for SOLAS compliant SESs**

1 EGC SafetyNET receivers for SOLAS installations

1.1 Background

The Global Maritime Distress and Safety System (GMDSS) is a radiocommunications system based on satellite and terrestrial technology, designed to improve communications relating to

distress and the safety of life at sea. It was adopted by the International Maritime Organization (IMO) in 1988, in the form of **Amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974** and came into effect on 1 February 1992. Implementation was completed on 1 February 1999.

It is the responsibility of national Administrations to determine whether a radio installation on board a ship meets the SOLAS requirements. This is done by national Type Acceptance or Approval testing of the sub-systems included in the installation and by inspection of the complete installation by a radio surveyor.

National Type Acceptance testing for SOLAS equipment will usually be based on GMDSS specifications and procedures prepared by the IMO and the International Electrotechnical Commission (IEC) on their behalf, although other national or regional specifications may be invoked as well.

The major IMO and IEC documents, which are identified in Section 1.2, not only summarize the general requirements for GMDSS equipment, but also the special requirements for SafetyNET EGC receivers for use in SOLAS installations, as specified by IMO/IEC.

To the extent possible, the technical requirements for SafetyNET EGC receivers for use in SOLAS installations have been harmonized with the above mentioned specifications, and conflicts between the documents should not arise. A number of the Inmarsat specifications have been completely revised to reflect the latest IMO/IEC requirements, for example the electromagnetic compatibility and environmental requirements.

1.2 *Principal relevant documents*

For Inmarsat-C and EGC GMDSS SESs, the principal relevant documents in addition to the Inmarsat-C SDM are:

- i) **"General Requirements for Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids"**, published by the IMO as **Resolution A.694(17)**.
- ii) **"Performance Standards for Inmarsat Standard-C Ship Earth Stations Capable of Transmitting and Receiving Direct-printing Communications-Annex: Recommendations on Performance Standards for Inmarsat Standard- C Ship Earth Stations Capable of Transmitting and Receiving Direct-printing Communications"**, published by the IMO as **Resolution A.663(16)**.
- iii) **"Performance Standards for Enhanced Group Call Equipment Communications-Annex: Recommendations on Performance Standards for Enhanced Group Call Equipment"**, published by the IMO as **Resolution A.664(16)**.
- iv) **"Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System and Marine Navigational Equipment"**, published by the IEC as **IEC 60945**.
- v) **"Global Maritime Distress and Safety System (GMDSS): Inmarsat-C Ship Earth Station and Inmarsat-EGC (Enhanced Group Call) Equipment. Performance Standards, Methods of Testing and Required Test Results"**, published by the IEC as **IEC 61097-4 Part 4**.

2 Introduction

2.1 *Enhanced Group Calls*

Enhanced Group Calls are a message broadcast service transmitted over the Inmarsat-C communications system. The service allows terrestrial information providers to pass messages or data to Class 2 or Class 3 SESs with EGC receivers or Class 0 stand-alone EGC receivers.

Enhanced Group Call messages are sent to Land Earth Stations (LESs) by Information Providers using terrestrial facilities such as Telex, PSTN, PSDN. The messages are processed at the LESs and forwarded to the Network Coordination Station (NCS) which transmits them on the common channel.

In addition to Inmarsat system messages, there are two primary services offered by EGC: SafetyNET service and FleetNET service. SafetyNET is a service provided in the GMDSS for the dissemination of maritime safety information (MSI), such as navigational warnings, meteorological warnings and forecasts and other urgent safety related information. FleetNET is a commercial communication service allowing terrestrial information providers to send messages to pre-defined groups of subscribers.

Both the SafetyNET and FleetNET services make use of flexible addressing techniques to allow the reception of messages from a variety of service providers depending on the particular requirements of the user. The SafetyNET service utilizes a geographical area addressing technique to direct messages to SESs within a defined boundary. SafetyNET is not generally used to send messages to individual receivers. The FleetNET service employs closed user groups and unique receiver addressing to provide secure transmission of messages from the terrestrial information provider to the desired service recipient(s).

2.2 *EGC receiver*

An EGC receiver is defined as a single-channel receiver with a dedicated message processor. Mobile Earth Stations of Class 2 and 3 provide an EGC capability in addition to To-Mobile and From Mobile messaging capabilities as indicated in Figure 6.1. Class 0 SESs are self-contained EGC receivers as shown in Figure 6.2.

2.3 *Type approval*

Inmarsat-C SDM presents the technical requirements and recommendations for an EGC receiver. These requirements must be satisfied before the equipment can be utilized in the Inmarsat system. Procedures for type approval by Inmarsat of a manufacturer's design are provided in a complementary document entitled "*Type Approval Procedures for Inmarsat-C Mobile Earth Stations*" published by Inmarsat.

3 General Requirements

3.1 *Mandatory capabilities*

The mandatory capabilities of SafetyNET receivers for SOLAS applications are:

- (a) Continuous reception of an NCS common channel and processing of the information according to the EGC message protocol; A Class 2 Inmarsat-C SES shall continuously receive the NCS common channel when not engaged in general communications;
- (b) Automatic recognition of messages directed to fixed and absolute geographical areas and service codes as selected by the receiver operator or based upon input(s) from navigational equipment.
- (c) SafetyNET receivers shall meet the requirements of IEC 61097-4 and IEC 60945; and
- (d) Provision shall be made for a visual indication that the ship's position has not been updated during the last 12 hours. It shall only be possible to reset this indication by revalidating the ship's position.

3.2 *Optional capabilities*

Additional optional capabilities required for reception of FleetNET service broadcasts are:

- (a) automatic recognition of uniquely addressed messages directed to a particular EGC receiver;
- (b) automatic recognition of messages directed to a group to which the receiver operator subscribes;
- (c) automatic response to group ID updates directed to that EGC receiver, adding or deleting group IDs as commanded.

4 **NCS common channel selection**

4.1 *General*

EGC receivers are equipped with facilities for storing up to 20 NCS channel numbers. Four of these are permanently assigned global beam channel numbers and frequencies as follows:

| NCS | NCS Common Channel | |
|------------|--------------------|-------------|
| | Channel No. | Frequency |
| AOR (West) | 11080 | 1537.70 MHz |
| AOR (East) | 12580 | 1541.45 MHz |
| POR | 12580 | 1541.45 MHz |
| IOR | 10840 | 1537.10 MHz |

These four Channel numbers are stored in ROM and are not alterable.

4.2 *NCS scanning*

Automatic NCS scanning, either as a result of high Bulletin Board Error Rate (BBER), or on a regular basis, is prohibited in SOLAS SafetyNET receivers. Instead, when the BBER is 80% or more out of the last hundred received bulletin board packets, an alarm shall be raised and the operator is advised to initiate NCS scanning manually.

5 Message processing requirements

The requirements of this section may be amended to comply with future recommendations of the IMO.

5.1 *General*

Acceptance or rejection of the EGC service code types is under operator control except that receivers shall always receive navigational warnings, meteorological warnings, SAR information and To- Ships distress alerts which are directed to a geographical area within which the receiver is situated

5.2 *Display devices*

5.2.1 *Message display*

It is recommended that the EGC receiver have a printer.

The display, or printer if fitted, shall be capable of presenting at least 40 characters per line of text. The EGC receiver ensures that if a word cannot be accommodated in full on one line it shall be transferred to the next line.

5.2.2 *Status display*

For receive-only EGC receivers an indication of EGC carrier frame synchronization (or loss of synchronization) is required as a minimum.

5.3 *Printer requirements*

For a SOLAS SafetyNET receiver the printer requirements apply. Received EGC messages may be stored for later printing with an indication to the operator that the message has been received. However, distress or urgency priority calls are directly printed as well as stored. Means are also provided not to print or store the same EGC message after it has been received error free and printed.

Messages are not printed until completely received, even in the case of multi- packet messages.

A local audible alarm is sounded to give advanced warning of a printer "paper-low" condition.

All SafetyNET messages are annotated with the time (UTC) and date of reception. This information is displayed or printed with the message. Note that UTC can be deduced from the NCS frame number.

5.4 *Character codes*

For the EGC service, the International Reference Version of the International Alphabet 5 (IA5), also known as ASCII (a standard alpha-numerical character set based on 7-bit codes) as defined in **ITU-T Red Book Recommendation T.50**, is used.

5.5 *Operator control*

The following control functions and displays are provided as a minimum:

- (a) selection of EGC carrier frequency;

For SOLAS SafetyNET receivers:

- (b) means of inputting the following information:
 - (i) mobile's position coordinates;
 - (ii) current and planned NAVAREA /METAREA; and
 - (iii) current and planned Coastal service coverage areas.

Receivers are fitted with operator controls to allow the operator to select desired geographical areas and message categories as described in *Section 5.7*. Details of the geographical areas and message categories, which have been selected for reception by the operator, are readily available.

Attention is drawn to the additional requirements of **IEC 61097-4**, Section 3.5.2 for SOLAS SafetyNET receivers.

5.6 *EGC receiver memory capacity requirements*

Both temporary and non-volatile memory is required in an EGC receiver for the following purposes:

- (i) message buffering;
- (ii) maintaining message identification records;
- (iii) storing position co-ordinates and NAVAREA geographical area data; and
- (iv) storing expansion NCS common channel numbers.

5.7 *EGC receiver addressing*

The five basic methods of addressing EGC receivers are:

- (i) all mobiles call;
- (ii) Inmarsat system message addressing;
- (iii) group addressing;
- (iv) unique addressing; and
- (v) geographical area addressing.

The type of address used in the header of an EGC packet is uniquely determined by the service code field.

5.8 *Message sequencing*

All messages are transmitted with a unique sequence number and the originating LES ID. Each subsequent transmission of the message will contain the original sequence number. This facility allows multiple printing of repeated messages to be inhibited.

5.9 *Geographical Area Addressing*

Geographical area addressing refers to messages transmitted to SESs in a particular area. The area may be expressed in terms of a fixed, pre-defined area such as the NAVAREA, or Coastal warning coverage area, or in terms of an absolute geographical address expressed as latitude and longitude coordinates on the surface of the earth.

An absolute geographical area address is a representation of a closed boundary on the surface of the earth given in the address field of the message header. The receiver recognizes two forms of absolute geographical addressing: rectangular and circular. Each form is specified in terms of an absolute position in latitude and longitude and further parameters that completely specify the boundary.

In order to process a geographical area address, the receiver must be programmed with the SESs current position. The position may be entered automatically from an external navigation aid or entered manually. The receiver shall provide notification to the operator when the position has not been updated for four hours. If the SESs position has not been updated for more than 12 hours, or is unknown because the equipment has been powered off, all SafetyNET messages with priorities higher than routine will be printed.

A geographical area address is considered valid for a particular SES if its current position falls inside or on the boundary specified by the address. It is a mandatory requirement that the operator be able to select more than one area, so that messages directed to other area(s) of interest can be provided. It is recommended that the operator be able to select at least four areas.

5.10 *Maritime Requirements*

When a message has been received error free and a permanent record made, the unique 16 bit sequence number, the LES identifier and the service code field associated with that message shall be stored in memory and the information used to inhibit the printing of repeated transmissions of the same message. **IEC 61097-4**, Section 3.4.10, refers.

The EGC receiver is capable of internally storing at least 255 such message identifications. These message identifications are stored with an indication of the number of hours that have elapsed since the message has been received. Subsequent reception of the same message identification shall reset this timer. After between 60 and 72 hours, message identifications may be automatically erased. If the number of received message identifications exceeds the capacity of memory allocated, the oldest message identification shall be erased.

6 **Testing functions**

It is recommended that all receivers have some self-testing capability.

6.1 *Link performance monitoring*

Means are provided for demonstrating that the receiver is functioning correctly and alerting the operator in the event of a malfunction. The SafetyNET EGC receiver continuously monitors the received bulletin board error rate (BBER) as a measure of link performance whenever it is tuned and synchronized to a NCS (or LES) TDM. The receiver stores a count of the number of

bulletin boards received in error out of the last 100 received. This count is continuously updated frame by frame.

7 Alarms and indications

The following alarms and indications are provided at a SOLAS SafetyNET receiver and meet the operational requirements for alarms stated in IEC 945.

7.1 Distress/Urgency Priority Call Alarm

For SOLAS SafetyNET receivers:

Provision is made for a specific audible alarm and visual indication at the position from which the ship is normally navigated to indicate receipt of a distress or urgency priority call, both EGC or individually addresses messages. It is not possible to disable this alarm and it is only possible to re-set it manually and then only from the position where the message is displayed or printed. **IEC 1097-4**, Section 3.4.6 refers.

7.2 Other alarms and indications

- (i) High BBER: Section 6.1 refers;
- (ii) Printer paper low: Section 5.3 refers;
- (iii) Receiver fault indication;
- (iv) Loss of receiver synchronisation: Section 6.1 refers; and
- (v) Position update: Section 5.9 refers.

It is recommended that any of these conditions generate a common alarm signal at the SafetyNET receiver (separate from distress alarm caused by a distress alert initiation or a distress priority message initiation or reception), which is capable of being extended to a remote alarm panel (e.g. by means of relay contacts) should this be required.

Additional alarms and indications may be provided at the manufacturer's discretion.

8 Electromagnetic compatibility

The interference and electromagnetic compatibility requirements of **IEC 60945**, Section 3.5 apply.

9 Environmental conditions

SOLAS SafetyNET receivers shall operate satisfactorily under the environmental conditions specified in the SDM. The latest issues of **IEC 61097-4** and **IEC 60945** apply.

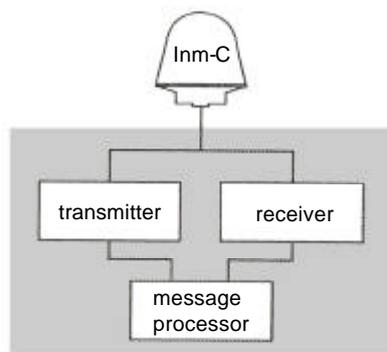
10 Optional features

10.1 Reception of SafetyNET or FleetNET service only

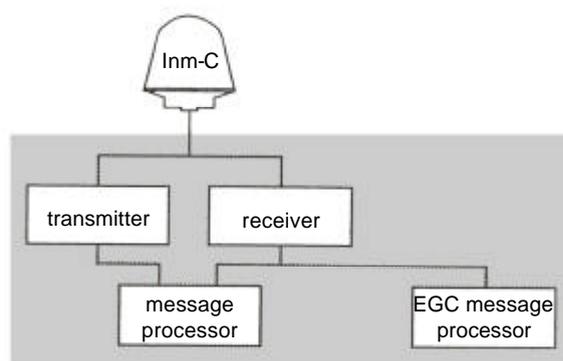
Manufacturers may choose to produce receivers capable of receiving both SafetyNET and FleetNET. In case of conflict between the two sets of technical requirements, the SafetyNET requirements shall apply.

11 Navigational interface

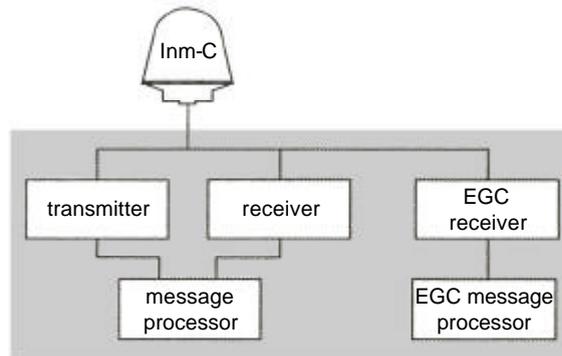
In order that a receiver's position may be automatically updated, receivers may be equipped with an interface to navigational instruments. A suggested standard interface is in IEC 61162, Part 1 (NMEA 0183) Standard for Interfacing Electronic Marine Navigational devices.



Class 1 (no EGC)

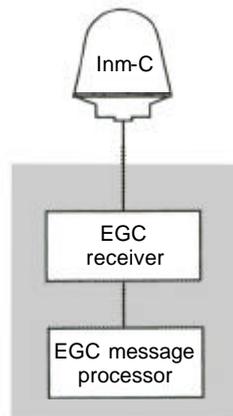


Class 2



Class 3

Figure 6-1 – Classes of Mobile earth stations



Class 0 (stand-alone EGC receiver)

Figure 6 - 2 – EGC receiver option

ANNEX 3

DRAFT MSC CIRCULAR

GUIDELINES FOR GENERAL RADIOCOMMUNICATIONS

The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its sixth session (18 to 22 February 2002), prepared guidelines for general radiocommunications which Member Governments are invited to bring to the attention of their relevant maritime Administrations, for information and action, as appropriate.

ANNEX

1 Terminology

1.1 General radiocommunications means operational and public correspondence traffic which could include safety related traffic other than distress, urgency or safety measures. ~~or~~ operational traffic could include ship movement, medical advice weather reports and other traffic related to the safe navigation of the ship, conducted by radio (SOLAS Chapter IV, regulation 2.1.5).

1.2 Public correspondence means any telecommunications, which the offices and stations must, by reason of their being at the disposal of the public, accept for transmission (ITU Radio Regulations, provision No. S1.116).

1.3 Alternative communication system means a communication system available to individuals or to ships in areas ~~other than the maritime VHF/MF services mentioned in SOLAS IV/ Regulation 5, considered for use of performing general communications onboard a ship in A1/A2 areas~~ where no maritime VHF/MF public correspondence services are available.

2 Criteria

2.1 The ship ~~must be~~ ~~should be~~ fully equipped for all GMDSS functions in all waters where it is sailing.

2.2 The alternative communication system or systems used for general communications in A1/A2 areas where no maritime VHF/MF public correspondence services are available should:

- .1 cover the area concerned (have a well defined coverage area such as map of coverage or estimate miles from coast station);
- .2 offer connection to the landbased public switched network;
- .3 be capable of ~~transmitting~~ handling traffic from ship-to-shore and from shore-to-ship ~~communications~~;
- .4 be capable of transmitting voice ~~and/or~~ written messages (~~such as telex~~ direct printing (email), fax, or data communications);
- .5 be in operation 24 hours a day; and
- .6 operate in accordance with the ITU Radio Regulations.

2.3 The ~~radio~~ appropriate personnel of the ship should be ~~educated~~ knowledgeable in the use of the alternative communication system or systems used onboard the ship for general radiocommunications in A1/A2 areas where no maritime VHF/MF public correspondence services are available.

2.4 The ~~radio~~ appropriate personnel of the ship should be fully aware of which areas are covered by the alternative system or systems used for general radiocommunications onboard the ship in A1/A2 areas where no maritime VHF/MF public correspondence services are available.

ANNEX 4

DRAFT REVISED ASSEMBLY RESOLUTION A.474(XII)

PROPER USE OF VHF CHANNELS AT SEA

THE ASSEMBLY,

RECALLING Article 15 (j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECOGNIZING that the proper use of VHF radiocommunication channels contributes to safety of life at sea and efficiency of navigation,

RECOGNIZING ALSO that misuse of VHF radiocommunication channels may cause serious interference to essential communications and is a potential danger to safety at sea,

CONSIDERING that the risk of misuse of VHF Radiocommunication channels is more likely when VHF equipment is operated by persons not trained in its proper use,

RECALLING that the Radio Regulations* require that the service of every ship radiotelephone station shall be controlled by an operator holding a certificate issued or recognized by the Government concerned,

RECALLING ALSO that, for the certification of masters, chief mates and officers in charge of a navigational watch, the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 1995, requires knowledge of procedures used in radiotelephone communications and ability to use radiotelephones in particular with respect to distress, urgency, safety and navigational messages,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its (seventy-fifth) session,

1. INVITES Governments to ensure that all persons on board controlling the operation of VHF equipment shall have knowledge of procedures used in radiotelephone communications and ability to use radiotelephones in particular with respect to distress, urgency, safety and navigational messages;
2. INVITES ALSO Governments to bring the Guidelines on the Use of VHF at Sea to the attention of all concerned;
3. REQUESTS Governments to take appropriate action to ensure that VHF channels are used correctly;

* Radio Regulations means the Radio Regulations annexed to, or regarded as being annexed to, the most recent international Telecommunications Convention which is in force at any time.

4. ADOPTS the Guidelines on the Use of VHF at Sea set out in the Annex to the present resolution;
5. AUTHORIZES the Maritime Safety Committee to keep these Guidelines under review and amend them as appropriate;
6. REVOKES resolution A.474 (XII).

ANNEX

GUIDELINES ON THE USE OF VHF AT SEA

1 VHF COMMUNICATION TECHNIQUE

1.1 Preparation

Before transmitting, think about the subjects which have to be communicated and, if necessary, prepare written notes to avoid unnecessary interruptions and ensure that no valuable time is wasted on a busy channel.

1.2 Listening

Listen before commencing to transmit to make certain that the channel is not already in use. This will avoid unnecessary and irritating interference.

1.3 Discipline

VHF equipment should be used correctly and in accordance with the Radio Regulations. The following in particular should be avoided.

- .1 calling on Channel 16 for purposes other than distress, urgency and very brief safety communications when another channel is available;
- .2 communications not related to safety and navigation on port operation channels;
- .3 non-essential transmissions, e.g. needless and superfluous signals and correspondence;
- .4 transmitting without correct identification;
- .5 occupation of one particular channel under poor conditions; and
- .6 use of offensive language.

1.4 Repetition

Repetition of words and phrases should be avoided unless specifically requested by the receiving station.

1.5 Power reduction

When possible, the lowest transmitter power necessary for satisfactory communication should be used.

1.6 Automatic identification systems (AIS)

AIS is used for the exchange of data in ship-to-ship communications and also in communication with shore-based facilities. The purpose of AIS is to help identify vessels; assist in target tracking; simplify information exchange (e.g. reduce verbal reporting); and provide additional information to assist situation awareness. AIS may be used together with VHF voice communications. AIS should be operated in accordance with resolution A.917(22) - Guidelines for the onboard operational use of shipborne automatic identification systems (AIS).

1.7 Communications with shore stations

1.7.1 On VHF channels allocated to port operations service, the only messages permitted are restricted to those relating to the operational handling, the movement and the safety of ships and, in emergency, to the safety of persons; as the use of these channels for ship-to-ship communications may cause serious interference to communications related to the movement and safety of shipping in port areas.

1.7.2 Instructions given on communication matters by shore stations should be obeyed.

1.7.3 Communications should be carried out on the channel indicated by the shore station. When a change of channel is requested, this should be acknowledged by the ship.

1.7.4 On receiving instructions from a shore station to stop transmitting, no further communication should be made until otherwise notified (the shore station may be receiving distress or safety messages and any other transmissions could cause interference).

1.8 Communications with other ships

1.8.1 VHF channel 13 is designated by the Radio Regulations for bridge-to-bridge communications. The ship called may indicate another working channel on which further transmissions should take place. The calling ship should acknowledge acceptance before changing channels.

1.8.2 The listening procedure outlined in paragraph 1.2 should be followed before communications are commenced on the chosen channel.

1.9 Distress communications

1.9.1 Distress calls/messages have absolute priority over all other communications. When receiving them all other transmissions should cease and a listening watch should be kept.

1.9.2 Any distress call/message should be recorded in the ship's log and passed to the master.

1.9.3 On receipt of a distress message, if in the vicinity, immediately acknowledge receipt. If not in the vicinity, allow a short interval of time to elapse before acknowledging receipt of the message in order to permit ships nearer to the distress to do so.

1.10 Calling

1.10.1 In accordance with the Radio Regulations channel 16 may only be used for distress, urgency and very brief safety communications and for calling to establish other communications which should then be conducted on a suitable working channel.

1.10.2 Whenever possible, a working frequency should be used for calling.

If a working frequency is not available, VHF channel 16 may be used for calling, provided it is not occupied by a distress call/message.

1.10.3 In case of a difficulty in establishing contact with a ship or shore station, allow adequate time before repeating the call. Do not occupy the channel unnecessarily and try another channel.

1.11 Changing channels

If communications on a channel are unsatisfactory, indicate change of channel and await confirmation.

1.12 Spelling

If spelling becomes necessary (e.g. descriptive names, call signs, words that could be misunderstood) use the spelling table contained in the International Code of Signals, the Radio Regulations and the IMO Standard Marine Communication Phrases (SMCP).

1.13 Addressing

The words "I" and "YOU" should be used prudently, Indicate to whom they refer.

Example:

Seaship, this is Port Radar, Port Radar, do you have a pilot?

Port Radar, this is Seaship, I do have a pilot.

1.14 Watchkeeping

1.14 Every ship, while at sea, is required to maintain watches (Regulation on Watches in Chapter IV of SOLAS, 1974, as amended). Continuous watchkeeping is required on VHF DSC channel 70 and also when practicable, a continuous listening watch on VHF channel 16.

2 VHF COMMUNICATION PROCEDURE

2.1 Calling

When calling a shore station or another ship, say the name of that shore station once (twice if considered necessary in heavy radio traffic conditions) followed by the phrase THIS IS and the ship's name twice, indicating the channel in use.

Example:

Port City, this is Seastar, Seastar, on Channel 14.

2.2 Exchange of messages

2.2.1 When communicating with a ship whose name is unknown but whose position is known, that position may be used. In this case the call is addressed to all ships.

Example:

Hello all ships, this is Pastoria, Pastoria. Ship approaching number four buoy, I am passing Belinda Bank Light.

2.2.2 Where a message is received and only acknowledgement of receipt is needed, say "received". Where a message is received and acknowledgement of the correct message is required, say "received, understood", and repeat message if considered necessary.

Example:

Message: Your berth will be clear at 08.30 hours.

Reply: Received, understood. Berth clear at 08.30 hours.

2.2.3 Where appropriate, the following message should be sent:

"Please use/ I will use IMO Standard Marine Communication Phrases".

When language difficulties exist which cannot be resolved by use of IMO Standard Marine Communication Phrases, the International Code of Signals should be used.

In this case the word "INTERCO" should precede the groups of the International Code of Signals.

Example:

"Please use/I will use the International Code of Signals".

2.2.4 Where the message contains instructions or advice, the substance should be repeated in the reply.

Example:

Message: Advise you pass astern of me.

Reply: I will pass astern of you.

2.2.5 If a message is not properly received, ask for it to be repeated by saying "Say again".

2.2.6 If a message is received but not understood, say "Message not understood".

2.2.7 If it is necessary to change to a different channel say "Change to channel" and for acknowledgement before carrying out the change.

2.2.8 During exchange of messages, a ship should invite a reply by saying "over".

2.2.9 The end of a communication is indicated by the word "out".

3 STANDARD MESSAGES

3.1 Since most ship-to-shore communications are exchanges of information, it is advisable to use standard messages which will reduce transmission time.

3.2 Commonly used standard messages are given in the IMO Standard Marine Communication Phrases (SMCP) , which should be used whenever possible.

REFERENCE DOCUMENTS

- SOLAS Convention, 1974, as amended, Chapter IV on Radiocommunications.
- Radio Regulations, Appendix S18, Table of Transmitting Frequencies in the VHF Maritime Mobile Band.
- Resolution A.917(22) on Guidelines for the Onboard Operational Use of Shipborne Automatic Identification Systems (AIS).
- Resolution A.918(22) on IMO Standard Marine Communication Phrases (SMCP).

ANNEX 5**LIAISON STATEMENT TO ITU-R WP 8B**

IMO has with thanks received a liaison statement from ITU WP 8B concerning a draft revision of Recommendation ITU-R M.493. IMO notes with great interest ITU's work in the revision of this recommendation and welcomes any simplification of the operational procedures. However, the proposed changes to Recommendation ITU-R M.493 so far seem quite extensive and substantive. Bearing in mind that the use of DSC in the GMDSS is based on earlier versions of Recommendation ITU-R M.493, WP 8B is therefore invited to make sure that amendments are still keeping the operational and technical requirements relevant for the GMDSS and to perform a consequential analysis of the amendments before they are finally adopted. It is further recommended that field trials be performed.

IMO recognizes the importance of a precise position to be available with distress alerts to facilitate the response of search and rescue Authorities. WP 8B is therefore invited to consider a requirement for integral electronic position-fixing devices for fitting in all new DSC equipment for use on board all types of vessels and, if possible, should also enable the display of location information.

ANNEX 6

**DRAFT IMO POSITION ON WRC-2003 AGENDA ITEMS CONCERNING MATTERS
RELATED TO MARITIME SERVICES**

WRC-2003 agenda item 1.3 – to consider identification of globally/regionally harmonized bands, to the extent practicable, for the implementation of future advanced solutions to meet the needs of public protection agencies, including those dealing with emergency situations and disaster relief, and to make regulatory provisions, as necessary, taking into account Resolution 645 (WRC-2000);

Background

Harmonized world-wide frequencies have been identified in Article **S5** and Appendices **S13** and **S15** for use in emergencies and in search and rescue situations. These cover communications with Rescue Co-ordination Centres and between ships, aircraft and other mobile units. Detailed operational procedures for these emergency and search and rescue situations have been established in IMO and ICAO.

It may be advantageous to identify certain frequencies or frequency bands for use by public protection agencies in support for major emergency situations and disaster relief. However, the conditions of use have yet to be established. Collaboration with air/sea rescue authorities is essential to ensure compatibility with any frequencies that may be identified in the context of this requirement.

IMO Position

Assist in the identification of frequencies and bands for use in the situations envisaged, provided that the use is in accordance with the provisions in the Radio Regulations, and does not cause interference to operational maritime or aeronautical distress and safety radio services. In particular, current IMO/ICAO Search And Rescue (IMOSAR) procedures should not be affected.

WRC-2003 agenda item 1.8.1 – consideration of the results of studies regarding the boundary between spurious and out-of-band emissions, with a view to including the boundary in Appendix S3;

Background

This agenda item continues actions remaining from consideration of Appendix **S3** at WRC-2000 on the boundary between the OOB emissions and the spurious emissions limits. ITU has adopted general limits for OOB and spurious emissions from radar systems in Recommendations ITU-R **SM.1541** annex 8, "Unwanted Emissions in the Out of Band Domain", and ITU-R **SM.329**, "Spurious Emissions".

In addition, Recommendation ITU-R **SM.329** contains four categories of spurious emission limits. Category A is included in Appendix **S3** of the Radio Regulations. Category B, specific to the European region, is included in CEPT Recommendation 74-01.

Category A limits apply to all radar types and Category B limits apply to radar systems in the radiodetermination service (fixed radiodetermination stations - wind-profiler, multi-frequency and active array radars - are excluded).

Recommendation ITU-R **SM.1541** also specifies a "design aim" which it is proposed could replace the currently agreed OOB limits after the current ITU studies are completed in about 2006. In general the direction the changes under study is towards more stringent limits for spurious and out-of-band emissions. These is manly required so that various satellite and space science services are not compromised – it being impossible to correct interference generated by satellites once launched. The changes agreed in ITU-R may however have other consequences, including the invalidation of several classes of radar systems currently used at sea or on land for maritime purposes. These systems have been used for several decades without adverse effects on other radiocommunication services. Any changes of that nature are only acceptable to the maritime community if phased in over a reasonable period of time.

IMO Position

IMO supports the rationalisation of definitions and limits for spurious and out-of-band emissions, but recommends that any changes that could prematurely invalidate the present generation of radars used for maritime purposes should be phased in over a reasonable timescale, which should be at least 10 years.

WRC-2003 agenda item 1.9 – to consider Appendix S13 and Resolution 331 (Rev.WRC-97) with a view to their deletion and, if appropriate, to consider related changes to Chapter SVII and other provisions of the Radio Regulations, as necessary, taking into account the continued transition to and introduction of the Global Maritime Distress and Safety System (GMDSS);

Background

During the transition period to full implementation of the GMDSS, the Radio Regulations have maintained dual provisions; Chapter **SVII** for operations within the GMDSS and Appendix **S13** for a non-GMDSS operations. However, maintaining support for both the old and new distress and safety systems for an extended period of time is costly and inconvenient for Search and Rescue Authorities and also complicates shipboard procedures.

Additionally, in order to ensure the safety of ships at sea, the International Telecommunications Union over the years has adopted numerous regulations and operational procedures for operators of shipborne radiocommunication stations. These requirements have not lessened with the advent of the GMDSS. Appendix **S16** of the Radio Regulations, for example, requires GMDSS-equipped ships to carry four large publications: the Alphabetical List of Call Signs, a List of Coast Stations and Coast Earth Stations, the List of Ship Stations and the Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services. Just one small portion of the last publication, entitled “Operational Procedures for the use of Digital Selective calling (DSC) Equipment in the Maritime Service”, contains 64 pages of instructions on operational DSC procedures.

Given that the post of Radio Officer has disappeared on board most ships following the introduction of the GMDSS, the remaining shipboard personnel can no longer be expected to remain proficient in all of these regulations, or even to use these publications to the extent originally intended when these regulations were first developed. These regulations cannot be dropped entirely, but they and the associated publications can be simplified significantly.

When the GMDSS was first developed, computer software was in its infancy, and neither IMO nor ITU equipment performance standards included software requirements. As a consequence, many operational details, such as those contained in the DSC operational procedures described above, were applied to operators of equipment rather than to designers of software for that equipment, with the result that operational incongruities abound. One obvious example, which leads to uncertain operating practice, is the requirement that broadcast safety messages must always be preceded by a digital selective calling announcement.

A deficiency of a more general nature in the regulatory framework is that Regulation IV/4.8 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, requires that every ship, while at sea, be capable of transmitting and receiving general radiocommunications to and from shore-based radio systems or networks. General radiocommunications support substantial safety and safety-related communications necessary for the safe operation of shipping, yet general radiocommunications receive no special protection under the Radio Regulations (see No. **S5.353A**).

IMO Position

1 Amendments to Chapter **SVII**, Resolution **331** and other provisions of the Radio Regulations are needed to refine the operational provisions in respect of MF/HF/VHF distress and safety procedures, and to promote the wider implementation of the GMDSS.

2 A large number of non-SOLAS vessels have not yet been fitted for the GMDSS and these vessels should not be left without regulatory control to meet their distress and safety communication requirements. Complete deletion of the provisions contained in Appendix **S13** is therefore premature at this time. Appropriate provisions for use of 2 182 kHz and VHF channel 16 for distress, urgency and safety calling by voice should be maintained in force pending a definitive conclusion on the most suitable communication techniques for such vessels. Nevertheless, the rules and procedures for 500 kHz operation can be suppressed.

3 ITU should, as a matter of urgency, undertake a significant reduction and simplification of operational procedures and regulations required of shipboard personnel. ITU should additionally conduct studies to review, modify and reduce the scope and content of regulations and publications required to be carried on ships. To help accomplish this, the ITU should consider applying future regulations to the design and operation of shipboard radiocommunication equipment, rather than to persons onboard ship. As an example Article **S33**, part 33.31, paragraph 15 of the Radio Regulations, should be modified in such a way that the announcement of scheduled marine safety broadcasts by using DSC will no longer be a mandatory requirement.

WRC-2003 agenda item 1.10.1 – exhaustion of the maritime mobile service identity numbering resource (Resolution 344 (WRC-97));

Background

Maritime mobile service identities (MMSIs) are required for many shipborne communications equipment (e.g., DSC, mobile earth stations). The MMSI is a 9-digit figure that provides a unique identification for ship stations, group ship stations, coast stations, and group coast stations. Three of the nine MMSI digits are the Maritime Identification Digits (MIDs). MIDs represent the territory or geographical area of administrations and are assigned by the ITU.

In anticipation that many ships would want access to the public switched telecommunication network via automatic radiocommunication systems a 6-digit ship station identity was also established as part of the maritime mobile service identity concept, using just the first six digits of the ship station MMSI. The intention was that the ship station identity would be incorporated into a diallable telephone number. This scheme would also create a direct and obvious link between ship station identities and international telecommunications numbers, which could be used to facilitate the control of distress communications.

The restriction to just six digits resulted from various routing, switching or billing limitations within national networks and number space limitations in the early maritime mobile-satellite systems. Although some of these difficulties have since been resolved the present situation remains that all ships expected to require access to the public switched telecommunication network have to be issued with MMSIs with three trailing zeroes in order to avoid ambiguities between the numbering systems involved. The first three digits are of course taken up with the MID. In the event, only the satellite systems have been able to resolve the various billing, routing, charging and signalling aspects in a manner compatible with the networks serving the rest of the communications environment. It has not proved feasible to establish single-stage connection procedures to ships over terrestrial radio paths that can satisfy all these aspects.

Therefore, for each MID assigned, only 999 numbers are available for use by ships with the present generation of maritime mobile-satellite networks operated by Inmarsat (Standard B, C and M). As the number of vessels carrying such systems increases, so there is more demand for MMSIs with three trailing zeros. Additional MIDs are now assigned by the ITU to administrations when they have used 80% of the MMSIs with three trailing zeros. The ITU, following established procedures, will not provide additional MIDs until administrations provide the ITU with evidence that 80% of their allotted MMSIs with three trailing zeros have been assigned.

Although the resource of MIDs is limited, it is anticipated to be sufficient to meet the needs of the maritime community for the foreseeable future using the present generation maritime mobile-satellite networks. Nevertheless, the ITU criteria and procedures for managing the MID and MMSI numbering resources can be improved by:

- .1 modifying Recommendation ITU-R **M.585-2** so as to remove restrictions on the MID number space that are no longer valid;
- .2 rationalising the criteria for assigning additional MIDs;
- .3 modifying Resolution **344** so as to instruct ITU-R to develop a Recommendation on the management of the MID and MMSI resources entirely as an ITU-R responsibility, including concepts such as re-use of suppressed MMSIs.

The three trailing zero constraint will eventually become redundant for new ships as the present generation of ship earth stations (Inmarsat B, C and M) reach the end of their useful life. For the purposes of international public correspondence telecommunication, the ship station identity is now only relevant for those existing systems that have the ship station identity embedded in the numbering scheme.

In the future, many new systems are expected to participate in the GMDSS. However, mobile satellite systems are now designed to offer service to a number of different sectors, not just the maritime sector, and as such can not support embedding the ship station identity in the international telecommunications number of the ship. The IMO has confirmed in COMSAR/Circ.26 that it is no longer valid to require that the MMSI be used in these systems as part of the diallable telephone number as long as the ship can be efficiently identified by accessing a database accessible 24 hours per day by appropriate authorities. All nine digits of the MMSI will then be available for use by all classes of shipping.

IMO Position

The use and management of the MID and MMSI numbering resources is governed by various ITU-R and ITU-T Recommendations and Article S19 of the Radio Regulations. ITU should review and rationalise these provisions in accordance with COMSAR/Circ.26, thus ensuring that the MID and MMSI numbering resources will remain adequate and be available for all classes of shipping, particularly recreational and other small vessels that remain within a nation's territorial waters.

WRC-2003 agenda item 1.10.2 – *shore-to-ship distress communication priorities (Resolution 348 (WRC-97))*;

Background

A shore-based search and rescue authority has no means to interrupt or pre-empt the satellite communications in use by a vessel in a distress or safety situation. This communications inability may increase the probability of loss of life and property.

IMO Position

The Conference should invite ITU-R and ITU-T, by means of a Resolution, to develop technical recommendations that describe the means whereby a shore-based search and rescue authority may interrupt a vessel's satellite communications during a distress situation. This Resolution should be maintained until the problem is resolved.

WRC-2003 agenda item 1.14 – *to consider measures to address harmful interference in the bands allocated to the maritime mobile and aeronautical mobile (R) services, taking into account Resolutions 207 (Rev.WRC-2000) and 350 (WRC-2000), and to review the frequency and channel arrangements in the maritime MF and HF bands concerning the use of new digital technology, also taking into account Resolution 347 (WRC-97)*;

Background

Administrations have reported interference on the HF calling, distress and safety frequencies used by the aeronautical and maritime mobile services. In a continuing effort to reduce interference to HF distress and safety frequencies used in the GMDSS, WRC-2000 determined that after 31 December 2003, general calling should not be permitted on channels used for distress and safety traffic. The radio regulations now permit routine voice calling on the two GMDSS duplex distress and safety traffic channels in the 12 and 16 MHz band. WRC-2000 actions removed the calling function on these two channels. These changes are scheduled to take effect on 31 December 2003. This has caused some difficulty and financial and personnel impact

to at least one maritime SAR authority that maintains listening watch in these bands, and receives occasional routine radiotelephone calls in addition to distress and safety calls. To avoid this problem, they have had to receive distress and safety calls on a working channel not designated for distress and safety purposes. This has caused some confusion to mariners wishing to send distress and safety calls.

A second related issue involves a need for more effective methods for ships and coast stations to call ships using DSC for routine communications. The Radio Regulations make it very difficult for ships and coast stations to make routine calls to other ships using DSC if all watchkeeping procedures are to be maintained with the available equipment. Alternatives for this type of communication do not exist. Channels are available for ships making routine calls to coast stations, and these channels should continue to be used. But ships do not guard these routine calling channels, and will not therefore be in a position to respond to routine calls from coast stations. Simplex HF DSC channels allowing routine calls from other ships do not exist, and experience has shown that the number of such calls would be small, and should not interfere with the distress and safety uses of this channel.

IMO Position

1 ITU-R should continue its interference-monitoring programme in these bands. Additionally, ITU-R should work with administrations whose stations are responsible for causing this interference to take necessary actions to quickly eliminate it.

2 Safety related routine voice calling on the 12 MHz and 16 MHz distress and safety radiotelephone channels should be allowed to and from those shore stations having search and rescue responsibilities, subject to safeguards being taken to not cause interference to distress and safety traffic.

3 IMO published COMSAR Circular 17, Recommendation on the Use of GMDSS Equipment for Non-Safety Communications, attached, which states “That GMDSS equipment should be utilized for routine communications or testing in order to ensure equipment availability and operator competency and also reduce the false alerts which are often transmitted inadvertently by inexperienced operators”. Accordingly, operators of DSC equipment should also be able to easily make routine calls, as well as distress, urgency and safety calls, to other ships as well as to and from stations on shore.

WRC-2003 agenda item 1.15 – to review the results of studies concerning the radionavigation-satellite service in accordance with Resolutions 604 (WRC-2000), 605 (WRC-2000) and 606 (WRC-2000);

Background

Resolutions 605 and 606 invites ITU-R and ICAO to conduct appropriate technical and regulatory studies in the bands used by GNSS in order to ensure that it does not cause harmful interference to radionavigation and radiolocation services. Another factor is that increasing use of radionavigation and radiolocation services near the operating frequencies used by GNSS could constrain the operation and development of GNSS.

IMO Position

Ships have become increasingly dependent on GNSS systems for safe navigation in inland waterways, harbor and any areas where shipping is congested. Additionally, GNSS availability is essential in congested waters and in hazardous passing situations and is, moreover, now treated as an integral part of automatic identification systems. No constraints should therefore be placed on GNSS that will in any way lessen or degrade its availability for maritime navigation in any navigable waterway.

WRC-2003 agenda item 1.17 – to consider upgrading the allocation to the radiolocation service in the frequency range 2 900-3 100 MHz to primary;

Background

Maritime radars have operated as a safety service in the band 2 900 to 3 100 MHz for over five decades, for the purposes of navigation and collision avoidance.

During that period aeronautical and radiolocation radars have also operated in the same band. The use for radiolocation has been designated as a secondary allocation and therefore should not cause harmful interference to the primary allocation of the maritime community. There have been no continuing instances of harmful interference to maritime radars that have been identified as being caused by radiolocation radars.

Mutual compatibility between maritime radionavigation radars and radiolocation radars is fostered by differences in some of their technical characteristics including the transmission waveforms and the associated rejection of undesired pulses by receiver filtering and signal processing. In addition, this mutual compatibility is further enhanced by the scanning of their antenna beams, so that, in percentage of time, undesired energy is seldom received, either by main beam or side-lobe coupling.

The studies and measurements that have been presented in ITU-R provide a solid basis for understanding why high-powered shipborne and land-based radiolocation radars have operated in this band in many parts of the world for decades without inflicting any significant troublesome interference to maritime radionavigation radars.

The advantages to the maritime community of this upgrading are –

- a) provision of an increased deterrent to non-radiodetermination services to sharing within this band;
- b) enhanced protection of the safety service by prolonging the life of this band as an exclusive radiodetermination band.

IMO Position

IMO supports the upgrade of the radiolocation service to co-primary status in the band 2 900 to 3 100 MHz. Additional provisions may be required in the Radio Regulations to ensure that radiolocation radars cannot compromise the operation of maritime radionavigation radars. Studies within ITU-R should continue.

WRC-2003 agenda item 1.26 – to consider the provisions under which earth stations located on board vessels could operate in fixed-satellite service networks, taking into account the ITU-R studies in response to Resolution 82 (WRC-2000);

Background

This agenda item seeks to permit the use of earth stations located on board vessels operating in fixed-satellite service networks and follows on from an initial consideration of this concept at WRC-2000.

The advantage for the maritime community is that it is possible to gain access to relatively low-cost broadband communication facilities using existing frequencies and space segments in the fixed-satellite service. Ship owners could benefit from the resulting possibilities for wideband communications which, moreover, can be operated with considerable cost savings over the current maritime-satellite systems. The main uses are telephone links for passengers on cruise liners and ferries. There are also a number of applications for ships that need to transfer large amounts of data to shore. The offshore oil industry is a prime example, especially as regards survey ship operations where real-time analysis ashore of data collected on-board ship becomes possible without the cost of the satellite link being a major limitation.

The regulatory and technical provisions that would enable earth stations located on board vessels operating in fixed-satellite service networks in the bands 3 700-4 200 MHz (space-to-Earth) and 5 925-6 425 MHz (Earth-to-space) were considered at WRC-2000 under agenda Item 1.8. These discussions were very contentious and it was agreed that further technical, legal and regulatory studies were required before such operation could be recognised in the Radio Regulations. In line with this, WRC-2000 adopted Resolution **82 (WRC-2000)**, which requests the ITU-R to study, as a complement to the 4 and 6 GHz bands, the use of other fixed-satellite service allocations in the 11/14 GHz bands.

At WRC-2000, only the bands 3700-4 200 MHz (space-to-Earth) and 5925-6 425 MHz (Earth-to-space) came under consideration. These bands are allocated to the fixed-satellite service rather than the maritime mobile-satellite service. Since WRC-2000, several other bands allocated fixed-satellite service have been studied.

The use of earth stations operating in fixed-satellite service networks on board ships gives rise to a number of operational and legal issues that must be addressed because of the potential for interference to other services allocated to some of the bands under consideration.

Studies in response to Resolution **82** show that interference-free operation can only be guaranteed beyond a certain minimum distance from the coast. This effectively means that an “off-shore” distance will have to be defined within which the earth station operator has to seek the permission of all potentially affected coastal states. The extent of the offshore distance depends on the frequency bands involved, the network characteristics and whether the ships in question are in motion or stationary. Typically the off-shore-distance decreases for higher frequency bands.

In October 2001 ITU-R Working Party 4-9S developed a preliminary draft new recommendation addressing the offshore distance in the 6 and 14 GHz bands. For ships in motion, offshore distances of 300 km and 125 km are currently suggested for the 6 GHz and 14 GHz bands respectively. Preliminary draft new recommendation on this and other aspects of the agenda item will be further considered by Working Party 4-9S at its meeting in April 2002.

Among the additional areas under consideration are operation within the “offshore” distance and coordination methods to determine zones within which interference needs to be evaluated. Furthermore, Working Party 49S is also considering the suitability of the band 6425 - 6725 MHz (extended C-band) for this purpose. Because this band is also used for passive microwave sensor measurements over the ocean a number of interference issues remain to be resolved.

IMO Position

IMO supports the orderly introduction of suitable bands for broadband maritime mobile communications in accordance with the regulatory and technical provisions needed to ensure compatibility with any other services that may be affected.

WRC-2003 agenda item 2 – to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution 28 (Rev.WRC-2000), and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with principles contained in the Annex to Resolution 27 (Rev.WRC-2000);

Background

The concept of incorporation by reference is also employed by IMO. The concept of incorporation by reference has been the cause of considerable discussion within ITU during WARC-92, WRC-95, WRC-97 and WRC-2000. Between WARC-92 and WRC-95 the Voluntary Group of Experts charged with simplifying the Radio Regulations recommended the explicit use of the concept in order to satisfy the twin aims of simplifying the Radio Regulations and reducing their volume by replacing many provisions of a technical or operational nature by references to ITU-R Recommendations, i.e., either existing Recommendations or Recommendations constructed for the purpose. Implicit in the concept was that the referenced texts would have the same mandatory character as would equivalent treaty text in the Radio Regulations. Many inconsistencies and difficulties were however encountered in the application the concept at WRC-95 and more so at WRC-97. WRC-2000 therefore decided that the definition and use of incorporation by reference needed further consideration. The result was that Resolutions **27** and **28** were comprehensively revised at WRC-2000, both in terms of the use of incorporation by reference and the procedures used for updating references.

The revised Resolutions clarify the meaning of incorporation by reference which, for ITU purposes, is now restricted only to references to text intended to have mandatory effect. The rules for identifying text suitable for incorporation by reference, the method of reference and related WRC procedures for treating instances of incorporation by reference have also been set out clearly. Another important clarification is that new instances of incorporation by reference will only be allowed if forming part of the action required under a substantive WRC agenda item. The procedures to be employed during WRCs now demand that the actual texts proposed for incorporation be available as conference documents, although limited to one per delegation in

order to minimise the workload on the reprographic service. Also, a conference document summarising new or updated instances of incorporation by reference has to be developed during the conference in order to ensure that Vol. 4 of the Radio Regulations, which contains the complete texts of all referenced material, is both up-to-date and complete.

Future action on this standing agenda item will be limited to approving new instances of incorporation by reference associated with the substantive agenda items and the “housekeeping tasks” of updating references to revised ITU-R Recommendations. The Bureau will carry prime responsibility for advising on the necessary housekeeping tasks. The role of administrations will therefore be limited to determining whether proposals for new instances of incorporation by reference are preferable to other solutions, such as including vital text directly within the Radio Regulations, and monitoring for any mistakes or inconsistencies regarding updated references.

Because of the number of ITU-R Recommendations dealing with the design and operation in the maritime mobile and maritime mobile-satellite service the task of ensuring that references are kept up to date is of direct interest to IMO. Incorporation by reference is quite well-suited to material of an operational nature or to stable technical material. Some new examples of incorporation by reference are now appearing in the draft CPM texts relating to the maritime service, notably in respect of agenda item 1.9.

However, because of the added complexity introduced by WRC-2000 for dealing with material incorporated by reference, it may be advisable to pursue solutions where possible. The situation regarding the revision of references to updated material previously incorporated by reference is also no longer predictable. The problem is that of deciding if the conference is competent to revise a particular reference, especially if the topic is not related to any item on the agenda. There has been increasing reluctance at recent WRCs to make changes under the standard “housekeeping” agenda items of WRCs on issues that are not related to the substantive parts of the agenda listed in item 1. To be certain of establishing competency, a related agenda item would have to be available, in which case the basic text of the Radio Regulations could have been referenced instead.

Careful consideration therefore needs to be given to the use incorporation by reference procedure in respect of procedures or regulations affecting maritime communication services in order to ensure that the matter in question is indeed of a mandatory nature and that no simpler methods are available to achieve the same objective. Where references are non-mandatory, it is not necessary to establish specific conditions in applying the texts quoted. In such cases, reference should be made using the terminology “the most recent version” of a Recommendation.

IMO Position

Incorporation by reference is of importance to IMO because of the close relationship between many of the ITU-R Recommendations related to GMDSS equipment, and its operation, to IMO performance standards.

IMO requests early indication of any changes proposed by ITU to the mechanism of incorporation by reference and to the list of incorporated Recommendations.

IMO requests that the removal of references to ITU-R Recommendations on pre-GMDSS procedures and review of references to the ITU-R Recommendations related to the GMDSS should be undertaken at WRC-03 and continued, if necessary, at the following conference.

WRC-2003 agenda item 7.2 – to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, taking into account Resolution 801 (WRC-2000);

Background

The preliminary agenda for the following WRC, expected to be held in the 2005/6 timeframe already includes the item 2.2 which is intended “to review the operational procedures of the Global Maritime Distress and Safety System (GMDSS), taking into account the experience since its introduction and the needs of all classes of shipping”.

Given the continued development of the GMDSS and the attention being given to ensuring that recreational and other small vessels, especially those that remain within a nation’s territorial waters, can participate effectively, it is essential that this item is retained of the definitive agenda for the following WRC.

IMO Position

IMO notes with satisfaction that matters related to maritime distress and safety communications are placed on the preliminary agenda for the following WRC (WRC-05/06). IMO strongly recommends this agenda items is retained on the final agenda for the following WRC.

ANNEX 7

**DRAFT RESOLUTION MSC.[...](75)
(adopted on .. May 2002)****MARITIME SAFETY AND SAFETY RELATED COMMUNICATIONS**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO that the ITU, at its 1997 World Radio Conference, reallocated what had been the Maritime Mobile-Satellite Service in the frequency bands 1530-1544 MHz and 1626.5-1645.5 MHz to a “generic” Mobile Satellite Service,

RECALLING FURTHER that to protect maritime communications, the ITU included a footnote in its Radio Regulations (S5.353A) stating that “priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System. Maritime mobile-satellite distress, urgency and safety communications shall have priority access and immediate availability over all other mobile satellite communications operating in a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, distress, urgency and safety communications of the GMDSS.”

CONSIDERING that regulation IV/4.8 of the International Convention for the Safety of Life at Sea (SOLAS), 1974 as amended in 1988, requires every ship, while at sea, be capable of transmitting and receiving general radiocommunications to and from shore-based radio systems or networks,

CONSIDERING ALSO that IMO considers that general communications contain substantial safety and safety-related communications necessary for the safe operation of shipping,

CONSIDERING FURTHER that, unless the above safety related communications are clarified, general communications receives no special protection under S.353A of the Radio Regulations,

NOTING the IMO position regarding this matter submitted to WRC-92, -95 and -97 in COMSAR 2/18 annex 8,

1. REAFFIRMS that all GMDSS maritime safety and safety related communications must be afforded adequate, effective and immediate access and protection, regardless of how it is routed or to whom it is addressed;
2. NOTES that the Radio Regulations defines distress, urgency and safety communications in articles S32 and S33;

3. NOTES ALSO that distress, urgency and safety communications include, but are not limited to:

- transmissions of maritime safety information,
- distress calls and traffic,
- acknowledgment and relaying of distress calls,
- search and rescue co-ordination communications,
- ship movement service communications,
- communications related to the safe operation of ships,
- communications related to navigation,
- meteorological warnings,
- meteorological observations,
- ship position reports, and
- medical emergencies (e.g. MEDICO/MEDIVAC);

4. REQUESTS the Secretary-General communicate this resolution to the International Telecommunications Union.

ANNEX 8**DRAFT CIRCULAR LETTER TO MEMBER STATES**

The International Maritime Organization (IMO) is, like the International Telecommunication Union (ITU), a specialized agency of the United Nations.

There are numerous questions of common interest to ITU and IMO, and IMO participates in various conferences and meetings of the ITU as an observer. However, the restrictions that are placed on observers are limiting IMO's ability to influence the work of these meetings, most notably the ITU World Radiocommunication Conferences. In order to enhance IMO views, Members are invited to support the work of IMO in the relevant meetings of the ITU World Radiocommunication Conferences.

Enclosed is a statement from IMO for the forthcoming Plenipotentiary Conference of the ITU, seeking to clarify the role of observers from UN organizations.

APPENDIX

**DRAFT STATEMENT TO THE ITU PLENIPOTENTIARY CONFERENCE ON
PARTICIPATION OF IMO AS AN OBSERVER IN THE ITU WORLD
RADIOCOMMUNICATION CONFERENCES**

Mr Chairman,
Mr Secretary-General,
Excellencies,
Distinguished Delegates.

The International Maritime Organization (IMO) is, like the International Telecommunication Union (ITU), a specialized agency of the United Nations. The existence of numerous questions of common interest to ITU and IMO requires IMO's participation in various conferences and meetings of the ITU. In particular, IMO participates in the ITU Plenipotentiary Conference, ITU World Radiocommunication Conferences and in meetings of the Radiocommunication Sector of the ITU.

Article 30 of the ITU Convention (No. CV320) states unequivocally that observers are not entitled to submit proposals. In addition, reports received from ITU Member States, the Council and the Sectors of the Union are also submitted to the Conference for consideration (No. CV321).

No specific provisions are contained in the Convention with regard to the submission of documents from observers. The current practice is that such documents are submitted to a conference as information documents by the Secretary-General of the ITU. They do not constitute proposals.

During WRC-2000, information documents were not listed as documents allocated to agenda items. They were referenced for information purposes only (Doc. WRC-2000/195, refers), and they were not introduced during the meeting.

Article 16 of the Rules of Procedures of Conferences and other meetings of the International Telecommunication Union states that it shall be the duty of the Chairman to protect the right of each delegation to express its opinion freely and fully on the point at issue. A delegation is the totality of delegates sent by the same Member State (No. CS/1005). Accordingly, observers are not identified as constituting a delegation.

Article 31A of the Rules of Procedures states that representatives of Sector Members of the Radiocommunication Sector may, with the authorization of the Chairman, make statements but shall not be authorized to participate in debates. The Rules of Procedure contain no explicit restrictions with regard to the participation in debates by those observers that are not Sector Members of the Radiocommunication Sector (such as IMO and the other specialized agencies of the United Nations identified in No. CV262).

Participation by IMO observers in a WRC can be vital to the progress of the work of the Conference since the IMO contributions represent the international maritime position agreed among the 161 Member States of the Organization.

During the WRC-2000 some restrictions were placed on observers, which limited their ability to participate in the work of the Conference. For instance, observers could only take the floor if requested by a delegation through the Chairman.

IMO and the International Civil Aviation Organization (ICAO) have approached ITU, seeking clarification on this issue, and have been advised by the ITU Secretary-General that, in order for a different and more appropriate status to be considered for their participation in future WRCs, further clarification of the provisions in the legal instruments of the Union may be necessary at the forthcoming ITU Plenipotentiary Conference in 2002 (PP-2002).

The ITU Radiocommunication Advisory Group (RAG), at its ninth meeting (Geneva, 12–16 March 2001), in addressing the issue of the role of Sector Members at WRCs, advised the ITU Secretariat that there was a need to clarify, with the legal unit of the ITU, the intent of the arrangement applied at WRC-2000. It was suggested that such clarification should be submitted to the next meeting of the RAG. The meeting also noted that some further clarification of the provisions in the legal instruments of the Union (e.g. Convention, Rules of Procedures) might be necessary at PP-2002.

Therefore, taking into account the above consideration, IMO believes that some ITU provisions addressing participation of observers from UN organizations in the ITU conferences should be developed and applied.

ANNEX 9

**DRAFT RESOLUTION MSC.[...](75)
(adopted on .. May 2002)****PERFORMANCE STANDARDS FOR INMARSAT SHIP EARTH STATIONS
CAPABLE OF TWO-WAY COMMUNICATIONS**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution A.886(21), by which the Assembly resolved that the function of adopting performance standards and technical specifications, as well as amendments thereto shall be performed by the Maritime Safety Committee on behalf of the Organization,

RECALLING FURTHER regulations IV/10.1 and 14.1 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, concerning radiocommunications for the Global Maritime Distress and Safety System (GMDSS), which require, respectively, that ships remaining in sea area A3 be provided with an Inmarsat ship earth station and that such ship earth stations shall conform to appropriate performance standards not inferior to those adopted by the Organization,

FURTHER RECALLING resolution A.888(21) by which the Assembly adopted the criteria and requirements for mobile-satellite communication systems being designed for use in the GMDSS after 1 February 1999 and, in particular, the requirements for new systems to provide prioritised pre-emption,

NOTING the transition of Inmarsat to a national law company and the consequential re-structuring of the International Mobile Satellite Organization (IMSO) to oversee certain public interests in the company's operations, including the continued provision of satellite services for the GMDSS,

RECOGNIZING the need to prepare performance standards for Inmarsat satellite communication equipment designed in accordance with resolution A.888(21) in order to ensure the operational reliability of such equipment and to avoid, as far as practicable, adverse interaction between satellite communication equipment and other communication and navigation equipment aboard the ship,

RECOGNIZING ALSO that Inmarsat discontinued type approval of Inmarsat-A ship earth stations in 1991,

RECOGNIZING FURTHER that the international telex service is being discontinued in an increasing number of countries,

HAVING CONSIDERED the recommendation made by the Radiocommunications and Search and Rescue Sub-Committee at its sixth session,

1. ADOPTS the Recommendation on Performance Standards for Inmarsat Ship Earth Stations Capable of Two-Way Communications set out in the Annex to the present resolution;
2. NOTES that part A of the Inmarsat design and installation guidelines is similar to the performance standards for ship earth stations capable of two-way communications and to the general requirements for shipborne radio equipment set out in resolution A.694(17);
3. RECOMMENDS Governments to ensure that every Inmarsat ship earth station which forms part of the GMDSS:
 - (a) if designed to operate in a system introduced after 1 February 1999, complies with the relevant requirements of resolution A.888(21) and conforms to performance standards not inferior to those specified in the Annex to the present resolution,
 - (b) if installed on or after 23 November 1996, conforms to performance standards not inferior to those specified in the Annex to resolution A.808(19);
 - (c) if installed before 23 November 1996, conforms to performance standards not inferior to those specified in the Annex to resolution A.698(17), which are in accordance with part A of the Inmarsat ship earth station design and installation guidelines;
4. INVITES IMSO to ensure that any amendments to part A of the ship earth station design and installation guidelines are agreed with the Organization prior to their adoption;

ANNEX

RECOMMENDATION ON PERFORMANCE STANDARDS FOR INMARSAT SHIP EARTH STATIONS CAPABLE OF TWO-WAY COMMUNICATIONS

1 INTRODUCTION

The ship earth station installation capable of telephony and data communication should comply with the general requirements set out in resolution A.694(17) and with the following minimum requirements.

2 TECHNICAL REQUIREMENTS

The equipment should be type approved by Inmarsat and should comply with the environmental conditions specified in its technical requirements for Inmarsat ship earth stations capable of two-way communications.

3 OPERATION

3.1 No control external to the equipment should be available for alteration of the ship station identity.

3.2 It should be possible to initiate and make distress calls by telephony or data communications from the position at which the ship is normally navigated and from any other position designated for distress alerting. In addition, where a room is provided for radiocommunications, means to initiate distress calls should also be fitted in that room.

3.3 Where no other means of receiving distress, urgency and safety broadcasts or an addressed distress alert relay are provided and existing levels of aural signals produced by the telephone or printer are considered to be inadequate, the ship earth station equipment should provide an aural/visual alarm of appropriate level.

3.4 It should be possible to interrupt or initiate distress calls at any time.

3.5 A distress call should be activated only by means of a dedicated distress button. This button should not be any key of an ITU-T digital input panel or an ISO keyboard provided on the equipment.

3.6 The dedicated distress button should*:

- .1 be clearly identified; and
- .2 be protected against inadvertent operation.

3.7 The distress call initiation should require at least two independent actions.

* MSC/Circ.862 – Clarifications of certain requirements in IMO Performance Standards for GMDSS equipment.

3.8 Paragraphs 3.5, 3.6 and 3.7 do not apply to Inmarsat-A ship earth stations.

4 RADIO FREQUENCY HAZARDS

In order to permit warning of potential radiation hazards to be displayed in appropriate places, a label should be attached to the radome indicating the distance at which radiation levels of 100 W/m^2 , 25 W/m^2 and 10 W/m^2 exist.

5 POWER SUPPLY

5.1 The ship earth station should normally be powered from the ship's main source of electrical energy. In addition, it should be possible to operate the ship earth station and all equipment necessary for its normal functioning, including the antenna tracking system, from an alternative source of energy.

5.2 Changing from one source of supply to another or any interruption up to 60 s of the supply of electrical energy should not render the equipment inoperative or require the equipment to be re-initialized.

6 ANTENNA SITING

6.1 It is desirable that the antenna be sited in such a position that no obstacles likely significantly to degrade the performance of the equipment appear in any azimuth down to an angle of elevation of -5° .

6.2 The siting of the antenna needs careful consideration, taking into account the adverse effect of high levels of vibration which might be introduced by the use of a tall mast and the need to minimize shadow sectors. Objects, especially those within 10 m of the radome which cause a shadow sector of greater than 6° , are likely significantly to degrade the performance of the equipment.

6.3 The above-deck equipment should be separated, as far as is practicable, from the antennae of other communication and navigation equipment.

ANNEX 10**DRAFT MSC CIRCULAR****GUIDELINES ON ANNUAL TESTING OF 406 MHz SATELLITE EPIRBs**

1 The Maritime Safety Committee, at its seventy-fifth session (15 to 24 May 2002) approved the following guidelines on annual testing of 406 MHz satellite EPIRBs, as required by new SOLAS regulation IV/15.9.

2 The testing should be carried out using suitable test equipment capable of performing all the relevant measurements required in these guidelines. All checks of electrical parameters should be performed in the self-test mode, if possible.

3 The examination of the installed 406 MHz satellite EPIRB should include:

- .1 checking position and mounting for float-free operation;
- .2 verifying the presence of a firmly attached lanyard in good condition; the lanyard should be neatly stowed, and must not be tied to the vessel or the mounting bracket;
- .3 carrying out visual inspection for defects;
- .4 carrying out the self-test routine;
- .5 checking that the EPIRB identification (15 Hex ID and other required information) is clearly marked on the outside of the equipment;
- .6 decoding the EPIRB 15 Hexadecimal Identification Digits (15 Hex ID) and other information from the transmitted signal, checking that the decoded information (15 Hex ID or MMSI/callsign data, as required by the Administration) is identical to the identification marked on the beacon;
- .7 checking registration through documentation or through the point of contact associated with that country code;
- .8 checking the battery expiry date;
- .9 checking the hydrostatic release and its expiry date, as appropriate;
- .10 checking the emission in the 406 MHz band using the self-test mode or an appropriate device to avoid transmission of a distress call to the satellites;
- .11 if possible, checking emission—in the 121.5 MHz band using the self-test mode or an appropriate device to avoid activating the satellite system;
- .12 checking that the EPIRB has been maintained by an approved shore-based maintenance provider at intervals required by the Administration;

- .13 after the test, remounting the EPIRB in its bracket, checking that no transmission has been started;
- .14 verifying the presence of beacon operating instructions.

4 Member Governments are invited to bring these guidelines to the attention of shipping companies, shipowners, ship operators, equipment manufacturers, classification societies, shipmasters and all other parties concerned.

ANNEX 11**DRAFT MSC CIRCULAR****GUIDELINES FOR SHORE-BASED MAINTENANCE OF
SATELLITE EPIRBs****1 Introduction**

1.1 The purpose of these Guidelines is to establish standardised procedures and minimum levels of service for the testing and maintenance of satellite EPIRBs to ensure maximum reliability whilst minimising the risk of false distress alerting.

1.2 The Guidelines are intended to be applicable both to 406 MHz EPIRBs and to L-band EPIRBs, as either type may be carried to comply with the requirements of SOLAS IV/7.1.6. EPIRBs may include 121.5 MHz transmitters, or Global Navigation Satellite System (GNSS) receivers.

1.3 The Guidelines also apply to service exchange EPIRBs. These should be properly encoded to match the appropriate registration database.

2 Shore-Based Maintenance (SBM) Provider

2.1 The SBM Provider should:

- .1 have a quality control system audited by a competent authority in respect of its servicing operation;
- .2 have access to adequate calibrated test equipment and facilities to carry out the SBM in accordance with these Guidelines;
- .3 have access to batteries and other spare parts to the original equipment specification;
- .4 have access to up-to-date technical manuals, service bulletins and the latest software versions as provided by the original equipment manufacturer;
- .5 keep records of maintenance, available for inspection by the Administration as may be required;
- .6 ensure that all personnel responsible for supervising and for carrying out the maintenance procedures are adequately trained and fully competent to perform their duties; and
- .7 issue of a shore-based maintenance report with a list of the test results and maintenance performed.

3 Prevention of False Distress Alerts

3.1 Throughout the testing and maintenance process, **great care must be taken to avoid the transmission of false distress alerts.** The transmissions may be picked up by aircraft as well as satellites.

3.2 A radio-frequency-screened room or enclosure should be used for all maintenance procedures involving, or likely to involve, any transmission from an EPIRB.

3.3 Provision of a 121.5 MHz monitor receiver is required; this will pick up the homing transmitter and give a warning if the EPIRB is accidentally activated outside the screened enclosure.

3.4 If a distress signal is transmitted accidentally, the local RCC should be contacted immediately and informed of the coordinates of the test site.

4 Maintenance Service interval

4.1 All satellite EPIRBs should be inspected and tested in accordance with MSC/Circ.[882].

4.2 Shore-based maintenance of satellite EPIRBs as defined in paragraph 1.2 should be carried out in accordance with these Guidelines at intervals specified by the Flag Administration, and not exceeding 5 years. It is recommended that the maintenance be performed at the time when the battery is to be changed.

5 Self-test

5.1 Prior to carrying out any maintenance and, upon completion, a self-test should be performed, following the instructions on the equipment, and the results noted.

5.2 Attention is drawn to paragraph 3 on the Prevention of False Distress Alerts. Avoidance of live transmissions is required to prevent unnecessary loading of the satellite channels.

5.3 Verify that the self-test mode operates properly. This check could be performed by holding the switch in self-test mode position for 1 minute after the first self-test mode burst transmission. All transmissions should cease after releasing the self-test mode switch. Additionally, for 406 MHz satellite EPIRBs which received the COSPAS-SARSAT type approval after October 1998 (Type Approval certificates 106 and higher) the number of self-test bursts should be verified to be no more than one.

6 Battery change

6.1 The main battery should be changed in accordance with the manufacturer's recommendations, including the replacement of any other routine service parts (e.g. seals, memory battery, desiccant).

6.2 The removed batteries should be disposed of in accordance with the manufacturer's and/or national/local recommendations.

6.3 After having changed the battery, the new expiration date should be displayed on the exterior surface of the EPIRB.

7 Satellite distress transmission

7.1 The satellite EPIRB should be activated in its normal transmitting mode (i.e. not just self-test). Attention is drawn to paragraph 3 on the Prevention of False Distress Alerts. Where seawater contacts are fitted, these should be connected together to activate the EPIRB.

7.2 The transmitted signal should be checked with a suitable test receiver to verify the signal integrity and coding.

7.3 The frequency of the transmitted signal should be recorded and verified to be within the limits required by the specification to which it is approved.

7.4 The output power of the transmitter should be checked in the self-test mode. A simple method of the emission verification, such as a low sensitivity receiver placed at an unobstructed distance of at least 3 meters from the EPIRB antenna, may be used for this check. The original equipment manufacturer may suggest an appropriate method to verify the output power. Attention is drawn to paragraph 3 on the Prevention of False Distress Alerts.

8 121.5 MHz homing transmission

8.1 The satellite EPIRB should be activated in its normal transmitting mode (i.e. not just self-test). Attention is drawn to paragraph 3 on the Prevention of False Distress Alerts. Where seawater contacts are fitted, these should be connected together to activate the EPIRB.

8.2 The transmitted signal should be checked with a suitable test receiver for the characteristic swept tone modulation.

9 Global Navigation Satellite System (GNSS)

9.1 Some satellite EPIRBs are designed to transmit a position derived from a GNSS receiver, which may be internal or external to the EPIRB.

9.2 The original equipment (EPIRB) manufacturer should be consulted for a method of testing the correct operation of this function, e.g.: by using a GNSS repeater/simulator or external input. This test may involve a live transmission from the EPIRB and should be performed in a screened room or enclosure in accordance with paragraph 3.2. Attention is drawn to paragraph 3 on the Prevention of False Distress Alerts.

9.3 A test receiver should be used to verify that the signal transmitted by the satellite EPIRB contains the correctly encoded position data derived from the GNSS receiver. Attention is drawn to paragraph 3 on the Prevention of False Distress Alerts.

10 Waterproof Integrity

10.1 The satellite EPIRB should be inspected for any signs of damage or cracks to the casing, or of water ingress. Any damaged item should be replaced in accordance with the manufacturers recommended procedures.

10.2 The satellite EPIRB should be tested for waterproof integrity at the end of the SBM. The equipment manufacturer may suggest an appropriate method to test the integrity of the EPIRB.

10.3 One method involves immersing the equipment in hot water (20-30 C above ambient) for a period of one minute. It can be readily seen if there are any problems with the seals, as the air inside the beacon expands and escapes as a stream of bubbles. This test should not be carried out with cool water, as the water may be drawn into the equipment without showing significant release of air bubbles.

10.4 Satellite EPIRBs equipped with seawater switches should have this function disabled during the immersion test to prevent activation, unless the complete test is performed inside a screened room. This disabling may be achieved by immersing the EPIRB complete with a mounting bracket if the bracket includes an interlock to prevent activation before release. In some cases the EPIRB contains an inversion switch, so it will not be activated if immersed in the inverted position. Consult the manufacturer for specific guidance.

11 Labelling

11.1 As a minimum, the equipment external labelling should be checked for the following details:

- .1 Manufacturer's serial number. This identifies the equipment, even if the programmed data (e.g. MMSI or callsign) is later changed.
- .2 The transmitted identification code:
 - For L-band EPIRBs, it will be the Inmarsat System Code.
 - For 406 MHz EPIRBs, this will be the beacon 15 Hexadecimal Identification (15 Hex ID) and other encoded identification information (MMSI / callsign) as required by the Administration. Verify that the label matches the information decoded from the self-test mode transmission using the test receiver. For the COSPAS-SARSAT location protocol beacons, the 15 Hex ID should correspond to position data set to default values.
- .3 The expiration date of the battery.
- .4 Date when the next shore-based maintenance is due (see 12.1).

11.2 The above checks also apply if a replacement EPIRB is provided by the SBM provider.

12 Shore-based maintenance report and other documentation

12.1 The results of shore-based maintenance should be provided in the form of a shore-based maintenance report, a copy of which is to be kept on board, and a label affixed to the exterior of the beacon detailing the name of the SBM provider and the date when the next shore-based maintenance is due.

12.2 The SBM provider may affix a tamperproof seal or similar device on completion of the SBM.

12.3 Before returning the beacon to the owner, or when providing a replacement beacon, the SBM provider should check the registration details with the beacon registry, where practicable.

ANNEX 12

DRAFT MSC CIRCULAR

**GUIDELINES FOR SHIP OPERATORS AND THE SEARCH AND RESCUE (SAR)
SERVICES ON MINIMUM REQUIREMENTS FOR SAR DATA PROVIDERS
HOLDING SAR CO-OPERATION PLANS IN ACCORDANCE WITH SOLAS
REGULATION V/7.3 AND MSC/CIRC.1000 AND THE PROVISION
OF UP-TO-DATE PLANS AT ALL TIMES**

1 The Maritime Safety Committee (MSC), at its seventy-fourth session (30 May to 8 June 2001), recalled that MSC 73, in adopting amendments to the 1974 SOLAS Convention, *inter alia*, revising chapter V, had also adopted regulation V/7.3, which requires all passenger ships to which SOLAS chapter I applies to have on board a plan for co-operation with appropriate search and rescue services in event of an emergency. Subsequently, MSC 73 had instructed the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) to revise MSC/Circ.864 on Guidelines for preparing plans for co-operation between search and rescue services and passenger ships on fixed routes (in accordance with SOLAS regulation V/15(c)), as appropriate.

2 The Committee, having considered the recommendations made by the COMSAR Sub-Committee, at its fifth session (11 to 15 December 2000), approved MSC/Circ.1000 on Guidelines for preparing plans for co-operation between SAR services and passenger ships (in accordance with SOLAS regulation V/7.3).

3 The Maritime Safety Committee, recalling the entry into force date of the 2000 SOLAS amendments, agreed that all ships to which SOLAS regulation V/7.3 applies should have co-operation plans in place by 1 July 2002.

4 MSC 74, in approving MSC/Circ.1000 instructed COMSAR 6 to develop, as a matter of urgency, minimum requirements for SAR Data Providers (SDPs) holding information on behalf of ships and their operators and the search and rescue (SAR) services in accordance with the above Guidelines, so as to ensure a prompt, reliable and error-free 24-hour service providing up-to-date data when required.

5 The Committee, at its seventy-fifth session (15 to 24 May 2002), having considered the recommendations made by the COMSAR Sub-Committee, at its sixth session (18 to 22 February 2002), approved Guidelines for ship operators and the search and rescue (SAR) services on minimum requirements for SAR Data Providers holding SAR co-operation plans in accordance with SOLAS regulation V/7.3 and MSC/Circ.1000 and the provision of up-to-date plans at all times.

6 Member Governments are invited to bring the annexed guidelines to the attention of SAR service providers, shipowners, ship operators, ship masters and others concerned and to use the provisions contained therein as appropriate.

ANNEX

GUIDELINES FOR SHIP OPERATORS AND THE SEARCH AND RESCUE (SAR) SERVICES ON MINIMUM REQUIREMENTS FOR SAR DATA PROVIDERS HOLDING SAR CO-OPERATION PLANS IN ACCORDANCE WITH SOLAS REGULATION V/7.3 AND MSC/CIRC.1000 AND THE PROVISION OF UP-TO-DATE PLANS AT ALL TIMES

Minimum requirements

- 1 If the objectives of SAR co-operation planning set out in MSC/Circ.1000 on Guidelines for preparing plans for co-operation between SAR services and passenger ships (in accordance with SOLAS regulation V/7.3), are to be met, and if the SAR Data Provider (SDP) system is to be used as detailed in that Circular, there are certain minimum requirements for an SDP to enable it to be effective.
- 2 Each SDP should:
 - .1 arrange for easy, continuous and immediate access to its SAR co-operation plans for relevant shipping companies and operators, and for all RCCs with responsibilities within the operating areas of the ships concerned;
 - .2 ensure that essential technical capabilities, such as computers and communications links, are reliable and are redundant or have arrangements in place for rapid repair, and are provided with sources of emergency power. This requirement may be satisfied by establishing a back-up SDP;
 - .3 ensure that updates to plans are made promptly accessible, and that back-up data in paper or electronic form is kept in a suitable safe location and is readily available;
 - .4 ensure that, if staff are necessary to provide data access to authorised users, such personnel are always available to handle urgent requests, trained to properly retrieve and transmit the needed information, and proficient in the use of the English language; and
 - .5 ensure that pertinent information in the International SAR Co-operation Plans Index, including information on the primary and any back-up SDPs, is kept up to date. Details of the Index, and the procedure for updating it, are included in MSC/Circ.1000.
- 3 A shipping company, RCC, or other suitable entity may act as an SDP. However, the ship cannot be her own SDP as this would negate the fundamental concept of easing the load on ship's staff during an emergency.

Information up date

4 The information contained in each SAR co-operation plan must be kept up to date. When the SDP system is being used, those with responsibility for ensuring that this is so are the ship, her operator, and the SDP itself. Each party to the plan is responsible for ensuring that information in the plan pertaining to itself is correct. This requires positive checking of the plan at regular intervals, and a clear process for making any amendments required.

5 As regards the ship and her operator, the requirements of the ISM Code should be considered to extend to the SAR co-operation planning process. The SAR co-operation plan should be an integral part of the Safety Management Manual. The Code requires that “the Company should establish and maintain procedures to control all documents and data which are relevant to the SMS” (Chapter 11). Such procedures should now be in place for all passenger ships. Regular review of SAR co-operation plans should be a part of the overall documentation review process.

6 SAR service and SDP information contained in each SAR co-operation plan should be audited in a similar way.

7 The International SAR Co-operation Plans Index must also be kept up to date. It is the SDP’s responsibility to ensure that this is done. SDPs should therefore check whether any amendments made to the plan affect the Index entry. If so, the SDP must notify the Index administrators in accordance with the procedure set out in MSC/Circ.1000.

ANNEX 13

DRAFT MSC CIRCULAR

LIST OF CONTENTS OF THE “EMERGENCY MEDICAL KIT/BAG” AND MEDICAL CONSIDERATION FOR ITS USE ON RO-RO PASSENGER SHIPS NOT NORMALLY CARRYING A MEDICAL DOCTOR

1 The Maritime Safety Committee (MSC), at its seventy-fifth session, [15 to 24 May 2002], recalled that in paragraph 1.3.3 of chapter 1 of the Annex to the International Convention on Maritime Search and Rescue (SAR), 1979, as amended, the term “Search and Rescue” was defined as “the performance of distress monitoring, communication, co-ordination and search and rescue functions, including provision of **medical advice, initial medical assistance, or medical evacuation**, through the use of public and private resources including co-operating aircraft, vessels and other craft and installations”.

2 Having considered the recommendations of the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its sixth session (18 to 22 February 2002), MSC 75 approved the List of contents of the “Emergency Medical Kit/Bag” and medical considerations for its use on ro-ro passenger ships not normally carrying a medical doctor, as set out in the annex.

3 Member Governments are invited to bring the annexed medical considerations and the List of contents of the “Emergency Medical Kit/Bag” to the attention of SAR service providers, shipowners, ship operators, ship masters and others concerned.

4 Member Governments are invited to report on their experience gained in the use of the “Emergency Medical Kit/Bag” to the organization.

ANNEX

**Medical considerations for the use of the “Emergency Medical Kit/Bag”
on ro-ro passenger ships, not normally carrying a medical doctor**

1 Apart from the list of contents for an “ Emergency Medical Kit/Bag ” to be used by a medical doctor on board certain ro-ro passenger ships, the following medical considerations should be taken into account for its use on board:

- .1 there is a high risk of a medical emergency occurring aboard any passenger ship even those cruising for a few hours only, particularly ro-ro ships and similar ferries carrying large numbers of passengers, because of the large scale of ages and possible previous illness of passengers;
- .2 many of these medical emergencies require treatment by a medical doctor either on board among the passengers or in the nearest hospital ashore;
- .3 evacuation of person in medical emergency, even by helicopter, will be unduly time consuming and be associated with avoidable risks for the person to be evacuated;
- .4 the IMO/ILO/WHO current regulations do not fully address this risk of medical emergencies aboard passenger ships **as they only regard health and safety of the seafarers considered as workers**;
- .5 when there is no medical doctor among the crew (if not “100 or more seafarers and ordinarily engaged on international voyages of more than three days” – ILO Convention No.164 – Art. 8), the master is responsible for medical care on board the ship (as he/she is on board any merchant or fishing vessel – ILO Convention No.164 – Art.9);
- .6 according to the 1978 STCW Convention, as amended, “the personnel designated to ensure the responsibility of medical care onboard” must follow and validate a medical training to be able to perform a medical examination or a teleconsultation with a Tele Medical Advice Service (TMAS), and to provide medical and nursing care under medical advice;
- .7 MSC/Circ.960 on Medical assistance at sea recommends MRCCs to cooperate with TMASs to facilitate and to improve medical assistance at sea and SAR Services.
- .8 whenever the master facing a medical emergency onboard can do it, he might call for a doctor possibly present among the passengers. Such a medical competency and action will improve the efficiency of the medical care rendered to the injured/ill passenger, provided that:

- .1 calling for a doctor should not delay the first-aid care to be rendered by the ship personnel while waiting for the doctor arrival; and
- .2 the master should take all reasonable steps to check the qualification of an individual who presents him/herself as a physician before allowing him/her rendering medical care to the patient;
- .9 the need for an “ Emergency Medical Kit/Bag ” is evident to facilitate the doctor’s action in an emergency because the patient must be treated “ on the spot ” before being transferred to the ship hospital for further medical care;
- .10 such an “Emergency Medical Kit/Bag” should:
 - .1 be portable;
 - .2 include any essential medicine and medical equipment to cope with a medical emergency on the spot, and guidance on their use;
 - .3 be kept securely;
 - .4 be labelled as follows: “The medicines in this bag are to be used by a qualified medical practitioner or a registered general nurse, a qualified paramedic or a ship personnel in charge of the medical care on board under the direct supervision of a medical practitioner on board the ship or under telemedical advice/prescription by a TeleMedical Advice Service (TMAS)”;
 - .5 be maintained by the master or under his responsibility with a regular accounting of its content; any drugs or piece of equipment used in an emergency should be accounted for and replaced,and appropriate records should be kept, as required by national laws; and
- .11 in any case, regarding the IMO (STCW)/ILO regulations, the master remains the only person responsible for the final decision (care on board, diversion of the ship, medical evacuation). However, at any time, he/she can get telemedical advice from a TMAS either to confirm the passenger – doctor action or to help the nurse, paramedic or ship personnel in rendering the best possible medical care. An official TMAS teleconsultation provides protection for the patient, the ship’s master and the passenger physician.

2 The list of contents for the “Emergency Medical Kit/Bag” for the use on certain ro-ro passenger ships without a medical doctor on board is set out in the appendix.

APPENDIX

**List of contents of an
 "EMERGENCY MEDICAL KIT/BAG" FOR RO- RO PASSENGER SHIPS
 NOT NORMALLY CARRYING A MEDICAL DOCTOR**

| 1 – Medical Equipment | |
|---|-------------------|
| Airway – Ventilation | |
| Oxygen giving set – (small portable) | 1 |
| Manual Resuscitator : (bag-valve – mask-resuscitator complete with oxygen reservoir and facemasks in 2 sizes) | 1 |
| Guedel Airway | in 3 sizes |
| Nebulizer with aerosol mask and oxygen tubing | 1 |
| Manual suction pump with : | |
| Yankauer suction catheters | 2 |
| Flexible catheters FG 14 size | 2 |
| Laryngoscope with Mc.Intosh spatula small, medium, large | |
| Endotracheal tubes | range of sizes |
| Magill-forceps | 1 |
| Flexible introducer for endotracheal tube | 1 |
| Diagnostic | |
| Anaeroid Sphygmomanometer | 1 |
| Stethoscope | 1 |
| Diagnostic penlight | 1 |
| Blood test sticks-glucose | 1 set |
| Blood lancets-sterile | 1 set |
| Electro Cardiogram Monitor with telemetry facility | * |
| Automatic External Defibrillator (AED) | * |
| Infusion - Injection | |
| Disposable infusion set | 2 |
| IV indwelling cannulas (G 16,18,20) | 2 of each |
| Adhesive dressing for indwelling cannulas | 2 |
| Disposable syringes 2,5,10 ml | 2 of each |
| Sterile disposable Needles | 6 (various sizes) |
| Tourniquet | 1 |
| "Sharps" disposable box | 1 |
| Sterile/antiseptic swabs | 5 |
| Miscellaneous | |
| Scissors (EMT shears) | 1 |
| Disposable gloves | 2 pairs |
| Thoracic drainage set + dual suction and discharge valve | * |

* Recommended depending on risk assessment, taking account of e.g. length of voyage.
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| 2 - Medicines | |
|--|---|
| Cardiovascular | |
| Atropine (1mg ampoule) | 3 |
| Adrenaline/Epinephrine (1 mg/1ml ampoule) | 5 |
| Adrenaline/Epinephrine (10 mg/1ml ampoule) | 5 |
| Furosémide (20 mg ampoule) | 4 |
| Glyceryl trinitrate (spray) | 1 |
| Anti-Arrhythmics (If ECG monitoring available): | |
| Digoxin, Lidocaïne, Amiodarone, Adenosine, Magnesium Sulphate | * |
| Beta Blockers : | |
| Propranolol or equivalent (ampoule) | 1 |
| Anti-Hypertension : | |
| Urapidil (ampoule) | 1 |
| Anticoagulants / Thrombolytics | |
| Heparin or alternative (ampoule) | 1 |
| Acetyl salicylic acid (250 – 500 mg) | 1 |
| Respiratory | |
| Salbutamol aerosol inhaler unit | 1 |
| Salbutamol for nebulisation (5 mg ampoule) | 5 |
| Beclomethasone Diproponate (Aerosol Inhaler) | 1 |
| Aminophylline and/or Salbutamol (IV) (ampoule) | 1 |
| Steroids | |
| Methylprednisolone (250 mg)/ Hydrocortisone (100 mg) (ampoule) | 1 |
| Antihistamines | |
| Promethazine or equivalent (25 mg ampoule) | 1 |
| Analgesics | |
| Morphine sulphate (10 mg ampoule) | 3 |
| Ketamine (50mg ampoule) | 2 |
| Tramadol or alternative (100 mg ampoule) | 2 |
| Sedatives | |
| Diazepam injection (10 mg ampoule) or equivalent | 2 |
| Neuroleptic: chlorpromazine (25 mg ampoule) or equivalent | 2 |
| Naloxone injection (0.4 mg ampoule) | * |
| Antiemetic | |
| Metoclopramide .(10 mg ampoule) or equivalent | 1 |
| IV Anesthetics | |
| Etomidate (20 mg ampoule) or equivalent | 2 |
| Midazolam (10 mg ampoule) | 2 |
| Suxamethonium (100 mg ampoule) | 1 |

* Recommended item

| 2 - Medicines | |
|--|---------|
| IV Fluids | |
| Ringer solution or NaCl solution 0,9% | 1000 ml |
| HEA or Modified Gelatine Infusion Solution (for plasma substitution) | 1000 ml |
| Hypertonic Glucose for IV infusion (30% - 50%) | |
| Hypertonic Glucose for IV infusion (30% - 50%) | 50 ml |
| Physiologic saline (10 ml ampoule) | 2 |
| 3 - First Aid Kit | |
| - one to be included or attached to the Emergency Medical Kit | |
| - contents as defined in national regulations. | |

ANNEX 14

BACKGROUND NOTE

**CONCERNING THE COMPETENCE OF THE UNITED NATIONS HIGH
COMMISSIONER FOR REFUGEES (UNHCR), IN RELATION TO
RESCUE AT SEA MATTERS**

Prepared for COMSAR 6

I. The competence of UNHCR

1. UNHCR's competence with regard to persons rescued at sea relates to the fact that they may include asylum-seekers in need of international refugee protection. UNHCR's mandate stems from the United Nations General Assembly in the form of Resolution 428 (V) of 14 December 1950, to which the UNHCR Statute is annexed.

2. Paragraph 6B of chapter II of the UNHCR Statute defines the Office's competence *rationae personae* in the following terms:

“6. The competence of the High Commissioner [for Refugees] shall extend to:

...

B. Any other person who is outside the country of his nationality, or if he has no nationality, the country of his former habitual residence, because he has or had well-founded fear of persecution by reason of his race, religion, nationality or political opinion and is unable or, because of such fear, is unwilling to avail himself of the protection of the government of the country of his nationality, or, if he has no nationality, to return to the country of his former habitual residence.”

3. The term “asylum-seeker” has been employed by the General Assembly in general resolutions relating to UNHCR since 1981. Historically, this concept is closely related to Executive Committee Conclusion No. 22.¹ The term can refer either to an individual whose refugee status has not yet been determined by the authorities but whose claim to asylum entitles him or her to a certain protective status on the basis that he or she could be a refugee, or to large-scale influxes of mixed groups in a situation where individual refugee status determination is impractical. Clearly, asylum-seekers form part of UNHCR's competence *rationae personae*.

II. Treaty and non-treaty instruments for which UNHCR has responsibility and which may contain relevant provisions

4. According to paragraph 8(a) of the UNHCR Statute, UNHCR should provide for the protection of refugees by promoting, supervising and developing international conventions for the protection of refugees.

¹ Executive Committee Conclusion No. 22 (XXXII) on Protection of Asylum-Seekers in Situations of Large-scale Influx; endorsed by General Assembly Resolution 36/125.

5. The central instruments in this regard are the 1951 Convention relating to the Status of Refugees and its 1967 Protocol. While the Convention does not directly refer to rescue at sea, the principle that refugees, including asylum-seekers whose status has not been determined and may be refugees, may not be refouled or returned to persecution, as set out in Article 33 of the Convention, applies to those who were rescued at sea as to other asylum-seekers.

6. It should also be noted that the Executive Committee of the High Commissioner's Programme (hereinafter referred to as "the Committee") was established by Economic and Social Council (ECOSOC) at the request of the General Assembly. It currently consists of representatives of 61 States, elected by ECOSOC on the widest possible geographical basis from those States with a demonstrated interest in and devotion to the solution of refugee problems. The Committee is not, in the full sense of the word, a governing body. It does not substitute for the policy making functions of the General Assembly and ECOSOC (vis-à-vis the High Commissioner as provided in UNHCR's Statute) but it has its own slate of executive and advisory functions.

7. In the exercise of its mandate, the Committee adopts Conclusions on International Protection (hereinafter referred to as "the Conclusions") addressing particular aspects of international protection. While the Conclusions are not formally binding, regard may properly be had to them as elements relevant to the interpretation of the international refugee protection regime. Conclusions of the Committee constitute expressions of opinion which are broadly representative of the views of the international community. The specialist knowledge of the Committee and the fact that its Conclusions are taken by consensus add further weight.

8. The Committee has formulated standards in relation to rescue at sea, which are formed by an analysis of the interface between international refugee law and international maritime law. They reflect in particular the experience of the 1980s which led to the conclusion that refusal to permit disembarkation, especially if only requested on a temporary basis, might have the adverse effect of discouraging rescue at sea and undermining other international obligations. The relevant Committee Conclusions dealing with rescue at sea are annexed to this Note.

9. The most salient observations/guidelines are the following:

- Conclusion No. 14, para. (c) notes it as a matter of concern: "...*that refugees had been rejected at the frontier...in disregard of the principle of non-refoulement and that refugees arriving by sea had been refused even temporary asylum with resulting danger to their lives...*".
- Conclusion No. 15, para. (c) states: "*It is the humanitarian obligation of all coastal States to allow vessels in distress to seek haven in their waters and to grant asylum, or at least temporary refuge, to persons on board wishing to seek asylum.*"
- Conclusion No. 23, para. 3 states "*In accordance with international practice, supported by the relevant international instruments, persons rescued at sea should normally be disembarked at the next port of call. This practice should also be applied to asylum-seekers rescued at sea. In cases of large-scale influx, asylum seekers rescued at sea should always be admitted, at least on a temporary basis. States should assist in facilitating their disembarkation by acting in accordance with the principles of international solidarity and burden-sharing in granting resettlement opportunities.*"

Concluding remarks

10. The international refugee protection regime is based on a number of common core understandings, which are interwoven and which ensure in their entirety a predictable and reliable international co-operative framework for the protection of refugees. These common understandings have evolved over time and proved their resilience in the face of a rapidly changing global environment. They are based primarily on international refugee law, international human rights law and fundamental humanitarian principles. They have been carefully crafted, not least in the context of the Executive Committee, and have responded to varying scenarios and complex refugee situations, including as regards the rescue of asylum-seekers at sea.

11. In the present context, as outlined in this preliminary note, these core understandings include principles designed to ensure:

- Rescue of people in distress at sea, irrespective of their status;
- Disembarkation;
- Respect for the principle of non-refoulement, including non-rejection at the frontier;
- Admission of asylum-seekers, at least on a temporary basis;
- Access to fair and effective asylum procedures;

12. UNHCR recognises that issues relating to rescue at sea have acquired a new importance in the current world environment. In this regard, the UN High Commissioner for Refugees welcomes the initiative of the Secretary-General of the IMO to establish an inter-agency group for the purpose of contributing to efforts currently underway within the IMO.

UNHCR
18 February 2002

ANNEX 15

DRAFT RESOLUTION MSC.[...](75)

**MAINTENANCE OF A CONTINUOUS LISTENING WATCH ON VHF CHANNEL 16
BY SOLAS SHIPS WHILST AT SEA AFTER 1 FEBRUARY 1999 AND
INSTALLATION OF VHF DSC FACILITIES ON NON-SOLAS SHIPS**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO that regulation 12.3, chapter IV of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended in 1988, requires that until 1 February 1999 or until such other date as may be determined by the Maritime Safety Committee, every ship while at sea shall maintain, when practicable, a continuous listening watch on VHF channel 16,

RECALLING FURTHER MSC/Circ.803 on participation of non-SOLAS ships in the Global Maritime Safety and Distress System (GMDSS),

RECALLING FURTHER that the Maritime Safety Committee, at its sixty-ninth session in May 1998, adopted resolution MSC.77(69) on maintenance of a continuous listening watch on VHF channel 16 by SOLAS ships extended the watch requirement until 1 February 2005, taking into account the large number of non-convention vessels yet to be fitted with VHF DSC facilities still using VHF channel 16 for distress and safety purposes,

NOTING that a large number of vessels to which the SOLAS Convention does not apply had not fitted GMDSS equipment by 1 February 1999 and, if watchkeeping was discontinued on VHF channel 16 by SOLAS Convention ships, such non-Convention vessels would, if in distress, be unable to alert Global Maritime Distress and Safety System (GMDSS)-fitted ships,

NOTING ALSO the time needed for the large number of non-Convention ships being required to carry a radio installation under national legislation, to be fitted with a VHF installation which includes DSC facilities, and to provide adequate GMDSS training for the large number of personnel required to operate the radio equipment of non-Convention ships,

NOTING FURTHER the many parts of the world, not covered by VHF coast stations, where distress alerts can only be received by ships in the vicinity of those in distress,

RECOGNIZING despite the best efforts of member states to encourage seagoing vessels being voluntarily fitted with VHF radio equipment to be fitted also with facilities for transmitting and receiving distress alerts by DSC on VHF channel 70, that there are many areas of the world where this has not occurred, and will not likely occur by 1 February 2005, and that non-convention vessels are likely to continue to use non-DSC VHF equipment as long as it is serviceable, available, and permitted by national legislation,

RECOGNIZING ALSO that there will be a need for an open "short distance frequency" where ships can reach each other for immediate voice inter-ship calling for distress, urgency and safety communications until digital selective calling (DSC) on VHF channel 70 becomes a capability commonly used by both Convention and non-convention ships,

RECOGNIZING FURTHER the capability of GMDSS-fitted ships to simultaneously maintain continuous listening watch on VHF channel 16 and for digital selective calling (DSC) on VHF channel 70,

BEING OF THE OPINION that, for the time being, safety of life at sea would best be served by retaining watchkeeping for GMDSS-fitted ships on VHF channel 16 so that all ships can establish and conduct communications with each other for distress, urgency, safety and general calling,

COGNIZANT that the Maritime Safety Committee has decided that, at the earliest opportunity, VHF digital selective calling on VHF channel 70 will be used universally for initial distress, urgency and safety alerting, using VHF channel 16 as the complimentary radiotelephony channel following the initial alert.

HAVING CONSIDERED, at its seventy-fifth session, the recommendation made by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its sixth session, with respect to the continuation of listening watch by GMDSS-fitted ships,

1. Having regard to SOLAS regulation IV/12.3, DETERMINES that every ship, while at sea, shall continue to maintain, when practicable, continuous listening watch on VHF channel 16, until such time as the Maritime Safety Committee may determine the cessation of this requirement, provided that a re-assessment is undertaken by the Organization no later than 2005;

2. URGES Governments to:

- .1 require all new VHF radio equipment manufactured for, or installed on or after 1 February 1999 on, seagoing vessels to which the 1974 SOLAS Convention does not apply to be fitted with facilities capable of transmitting and receiving distress alerts by DSC on VHF channel 70;
- .2 require all seagoing vessels to which the 1974 SOLAS Convention does not apply, but which are required to carry a radio installation under national legislation, to be fitted with a radio installation which includes facilities for transmitting and receiving distress alerts by DSC on VHF channel 70 no later than 1 February 2005;
- .3 encourage seagoing vessels being voluntarily fitted with VHF radio equipment to be fitted also with facilities for transmitting and receiving distress alerts by DSC on VHF channel 70 no later than 1 February 2005;
- .4 require all vessels being fitted with facilities in accordance with sub-paragraphs .1 to .3 above, to maintain, when practicable, a continuous listening watch on VHF channel 16 until such time as the Maritime Safety Committee may determine the cessation of this requirement, taking into account that a re-assessment will be undertaken by the Organization no later than 2005; and to require personnel operating such equipment to be adequately trained, taking into account ITU Resolution 343 (WRC-97);

- .5 advise the Organization no later than 2005 on progress in establishing VHF DSC capability ashore and at sea to allow the Maritime Safety Committee to make appropriate decisions; and
 - .6 support the IMO position, as prescribed in the present resolution, at the ITU World Radiocommunication Conference 2003.
3. INVITES Governments to bring this decision to the attention of all seafarers, fishing vessel personnel, shipowners, ship operators, the off-shore industries, radio equipment manufacturers, coast stations and all others involved or who may be involved in search and rescue operations at sea;
4. INVITES FURTHER the Secretary-General to bring this resolution to the attention of the Secretary-General of the International Telecommunication Union.
5. REVOKES resolution MSC.77(69).

ANNEX 16

DRAFT MSC CIRCULAR

GUIDANCE ON SHIPS DAILY REPORTING OF
THEIR POSITIONS TO THEIR COMPANIES

1 The Maritime Safety Committee, at its seventy-fifth session (15 to 24 May 2002), noted with concern, that ships continue to be lost without distress signals being received by search and rescue services, a situation that delays the rescue of survivors because of uncertainty regarding the ship's position.

2 The Committee also noted that the recent *Report of the Re-opened Formal Investigation into the loss of the MV Derbyshire* had recommended, *inter alia*, that "the IMO should require the compulsory daily reporting of the position of all vessels".

3 The Committee further noted that:

- .1 Emergency Position Indicating Radio Beacons (EPIRBs), that transmit via satellite a distress signal which includes their position, are intended to float-free and automatically activate in the event of a ship sinking;
- .2 Chapter V of the International Convention on the Safety of Life at Sea (SOLAS), 1974, as amended and Chapter 5 of the International Convention on Maritime Search and Rescue (SAR), 1979, as amended both include provisions regarding ship reporting; and
- .3 in the context of on-going discussions in respect of resolution A.924(22) on the Review of measures and procedures to prevent acts of terrorism which threaten the security of passengers and crews and the safety of ships, the Organization was considering the development of a long-range version of the Automatic Identification System (AIS).

4 The Committee, while acknowledging that the systems referred to in paragraph 3 above, enhance the probability that a relatively recent position of a ship in distress is available to search and rescue services in a timely manner, agreed that it was also necessary to urge all ships which are not:

- .1 already participating in a ship reporting system; or
- .2 trading on a regular route where the voyage time between successive ports is less than 24 hours,

to report their position to their companies, as defined in Chapter IX of SOLAS, at least once every day.

5 Member Governments and international organizations concerned are invited to bring this circular to the attention of all concerned.

ANNEX 17

Ref. T1/6.03

**DRAFT MSC CIRCULAR ON
ADOPTION OF AMENDMENTS TO THE INTERNATIONAL
AERONAUTICAL AND MARITIME SEARCH
AND RESCUE (IAMSAR) MANUAL**

1 The Maritime Safety Committee (MSC), at its [seventy-fifth session, 15 to 24 May to 2002], having been informed that the International Civil Aviation Organization [had approved] amendments to the IAMSAR Manual, as prepared by the Joint ICAO/IMO Working Group on Harmonization of Aeronautical and Maritime Search and Rescue and endorsed by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) at its sixth session (18 to 22 February 2002), adopted the annexed amendments in accordance with the procedure laid down in resolution A.894(21).

2 MSC 75 decided that the adopted amendments should apply as from [1 July 2003].

ANNEX

AMENDMENTS TO THE IAMSAR MANUAL*

SECTION 1

Aeronautical advice to MRCCs

Volume I: Add a new paragraph 2.3.4

“2.3.4 A Coastal State may have a MRCC but not be able to be provided with an ARCC. In such a case the SAR Manager should arrange a suitable organizational relationship to provide the MRCC with aeronautical advice. Advice may be available from aeronautical facilities close to hand, such as an aerodrome tower, an ARCC, a Flight Information Centre (FIC), or an area control centre (ACC).”

Volume II: Add to the bottom of paragraph 3.4.4

“An MRCC may also request an ATS unit to provide the above information in the case of an aeronautical incident at sea. The MRCC should communicate first with a local ATS unit, such as an aerodrome tower. An ARCC, a Flight Information Centre (FIC) or an area control centre (ACC) may also have relevant information, or may be able to assist with investigations using aeronautical communications and resources.”

* Contents and index for each volume should be checked and renumbered, if necessary.

SECTION 2

Media Relations

Volume I – System Management

Add new section 5.7 as follows:

“5.7 Dealing with the Media

5.7.1 The management of media affairs is an important element in SAR operations and should be an integral part of the SAR system. It should thus receive appropriate consideration and planning. If the media do not obtain information from the primary source they will seek it elsewhere. Incorrect or misleading information may then emerge which will benefit no-one and may lead to undue concern amongst Next of Kin.

5.7.2 As search and rescue operations often take place in public, it is important that the information that emerges is correct. The SAR service thus has a responsibility to ensure that an accurate picture is reported. As the primary source, the SAR service should be proactive in communicating facts to the media. Holding back information that is available from other sources may lead to incorrect information being communicated by the media.

5.7.3 All personnel who may be required to have direct contact with the media should receive appropriate training.”

Volume II – Public Relations

3.1 Amend text as follows:

1.10.3 (a). In order to ensure the formulation of a consistent and controlled message to the public, the RCC (or its media relations personnel) should be designated as the focal point for the releases of information relating to SAR operations. Press releases or media conferences can be used as an early release of information, a public update on progress, and as a final release summarizing the entire case after SAR operations are concluded. All information released by the RCC should normally be approved by the SMC and appropriate authorities, and contain only factual information.

1.10.3 (b). Once initial media information has been released, the RCC should consider programming and advertising regular and frequent updates in order to address the needs of the media. These could take the form of further press releases or holding press conferences. A press conference gives the RCC the opportunity to initiate the following actions:

- give information;
- give interviews;
- answer questions;

- summarize what has happened and what the RCC is doing in order for the media to fully understand what has occurred;
- give the RCC a “human face”; and
- give the media controlled opportunities to obtain video footage, photographs, and audio for broadcast use.

1.10.5. When a major incident occurs, such as with a large aircraft or cruise ship, hundreds of persons may be at risk, involving many nationalities. In this situation, the RCC could become the focus of the world attention. Such events will undoubtedly require the involvement of other emergency service providers and a concerted effort will be required by the RCC if a consistent and controlled message to the public is to be maintained. Actions by the RCC may include the following:

- request representatives from involved emergency service providers to help man a joint media relations team;
- select a spokesperson(s);
- issue a press release;
- make information available on the Internet;
- call a press conference;
- prepare a room for the media; and
- control media access.

4 Volume III – Media Relations

4.1 Add the following paragraph at the end of the topic – *Contact with the Media*, page 2-39:

- The rescue facility spokesperson should refer any request for personal opinions, comments on departmental policies, search rationale or matters dealing with sensitive matters to the appropriate RCC and/or higher authority.

SECTION 3

ACO Function

Amendments and proposals to the text in IAMSAR Manual Volume I, 2.6.1

Proposal: 2.6.1 Responsible authorities should find ways for information, training and exercising the ACO function, both for those who act as ACO and for those who co-operate closely with ACO.

Amendments and proposals to the text in IAMSAR Manual, Volume II, 1.2.5 (Volume I, 2.6). Text in italics constitutes proposed revisions to text.

1.2.5 Aircraft Coordinator. *The purpose of the aircraft coordinator function is to maintain high flight safety and co-operate in the rescue contribution to make it more effective. The ACO function should be seen as cooperating, supporting and advisory service.*

The aircraft coordinator should normally be designated by the SMC, or if that is not practicable, by the OSC. ACO is normally the facility with the most suitable mix of communication means, radar, *GNSS (Global Navigation Satellite System)* combined with trained personnel to effectively co-ordinate the involvement of multiple aircraft in SAR operations while maintaining flight safety. Generally the ACO is responsible to the SMC; however, the ACO work on-scene must be co-ordinated closely with the OSC, and if no SMC or OSC, as the case may be, would remain in overall charge of operations. Duties of the ACO can be carried out by a fixed-wing aircraft, helicopter, ship, a fixed structure such as an oil-rig, or an appropriate land unit. Depending on needs and qualification, the ACO may be assigned duties that include the following:

Co-ordinate the airborne resources in a defined geographical area;

Maintain flight safety – *issue flight information;*

Practise flow planning (example: point of entry and point of exit);

Prioritise and allocate tasks;

Co-ordinate the coverage of search areas;

Forward radio messages (can be the only duty);

Make consolidated situation reports (SITREPs) to the SMC and the OSC, as appropriate; and work closely with the OSC;

It is important that the ACO is aware of the fact that the participating airborne units, if possible, try to avoid disturbing (noise and rotor wind) other participating units.

SECTION 4

Critical incident stress management

Volume I

New text to insert into section 2.1.7 add to the list:

Critical incident stress counselors

New bullet in section 5.3.3, insert before the last bullet

Develop procedures to provide critical incident stress counselling to SAR personnel

Volume II

New text to insert into Volume II, before existing Section 6.18, renumber existing 6.18 to 6.19.
Amend Table of Contents page vii as appropriate

6.18 Critical Incident Stress

6.18.1 Exposure to traumatic events and duties, particularly if they involve dead, mutilated or dismembered bodies, is extremely stressful. SAR personnel may need to cope with such situations during or after a SAR operation. Adverse psychological effects of working in such an environment increase with prolonged exposure, and may be cumulative for personnel involved in multiple events over time.

6.18.2 Aircraft accidents may involve SAR personnel in such operations for a prolonged period, especially if the accident occurs at sea where there are few alternative personnel and facilities to handle recovery of dead, mutilated or dismembered bodies.

6.18.3 Recovery time for persons so exposed is commonly two to three months, but may last over one year and may require professional help a year or more after the event. Even persons experienced in their profession, and with duties such as body recovery, can experience acute or long-term health problems during and after responding to such events. SAR personnel often do not realize how they can be affected.

6.18.4 Situations involving death, severe injuries, etc. usually cause SAR personnel to consider the vulnerability of themselves and others close to them, and to share the anguish of family members and others adversely affected by the tragedy. Event anniversaries may trigger adverse responses.

6.18.5 When SAR authorities assign personnel to on scene duties, transport or other responsibilities involving handling or viewing of bodies or body parts, or to similar traumatic duties, they should:

- (a) After severe events, arrange separate debriefings or counselling sessions for each category of personnel. The demands differ and it is important that the group is I-2 Proposal for amendment - Critical incident stress management small and has an understanding of the incident from their own professional perspective;

- (b) Daily or at each shift change, provide information and advice to crews coming on duty to perform such tasks, and counsel them when they are relieved, regardless of whether the persons involved believe they need the assistance;
- (c) Conduct a thorough critical incident stress debrief for crews when they will no longer be returning to traumatic duties;
- (d) Minimize unnecessary exposure when possible, and in any case, limit assignment to such duties to a maximum of three weeks without subsequently returning them to the operation;
- (e) If possible, schedule adequate rest periods to minimize fatigue, a major factor in compounding traumatic stress;
- (f) Limit the number of personnel involved when practicable;
- (g) After crews have been debriefed and relieved of duty, arrange to follow-up with them and their families to monitor needs and assist as appropriate; actively follow-up for at least one year since symptoms and problems are sometimes delayed;
- (h) To aid recuperation after exposure, schedule at least 48 hours away from work responsibilities;
- (i) Provide access to trained counselling, chaplains, and other human support services during and after the event, and involve spouses or other close persons in follow-up efforts to help the person affected recover more easily; and,
- (j) Arrange for expressions of appreciation by senior personnel, as well as public expressions of appreciation, as these can help personnel adapt after facing stressful duties.

SECTION 5

Volume II, Appendix B

Pages B-2 to B-4 should be replaced with the pages of this section as follows:

Examples of COSPAS-SARSAT Formats

Note: Not all variations have been included in the examples but may be developed using the message field table and examples that follow.

MESSAGE CONTENT OF A COSPAS-SARSAT ALERT

| Message Field # | TITLE |
|--------------------|--|
| 45 | MESSAGE TYPE |
| 46 | CURRENT MESSAGE NUMBER |
| 47 | MCC REFERENCE |
| 48 | DETECTION TIME & SPACECRAFT ID |
| 49 | DETECTION FREQUENCY |
| 50 | COUNTRY OF BEACON REGISTRATION |
| 51 | USER CLASS OF BEACON |
| 52 | IDENTIFICATION |
| 53 | EMERGENCY CODE |
| 54 | POSITIONS |
| 54a | RESOLVED POSITION |
| 54b | A POSITION & PROBABILITY |
| 54c | B POSITION & PROBABILITY |
| 54d | ENCODED POSITION AND TIME OF UPDATE |
| 55 | SOURCE OF ENCODED POSITION DATA |
| 56 | NEXT PASS TIMES |
| 56a | NEXT TIME OF VISIBILITY OF RESOLVED POSITION |
| 56b | NEXT TIME OF VISIBILITY A POSITION |
| 56c | NEXT TIME OF VISIBILITY B POSITION |
| 56d | NEXT TIME OF VISIBILITY OF ENCODED POSITION |
| 57 | BEACON HEX ID & HOMING SIGNAL |
| 58 | ACTIVATION TYPE |
| 59 | BEACON NUMBER |
| 60 | OTHER ENCODED INFORMATION |
| 61 | OPERATIONAL INFORMATION |
| 62 | REMARKS |
| 63 | END OF MESSAGE |

**SAMPLE WITH MESSAGE FIELD ANNOTATIONS
(406 MHz Notification of country of beacon registration -NOCR)**

FROM AUMCC
TO RCC AUSTRALIA

(Message
Field #)

| | | |
|--------|-----|--|
| #45 | 1. | DISTRESS COSPAS-SARSAT NOTIFICATION OF COUNTRY OF BEACON REGISTRATION ALERT |
| #46,47 | 2. | MSG NO. 16999 UKMCC REF 12345 |
| #48 | 3. | DETECTED AT 22 FEB 95 1708 UTC BY SARSAT 04 |
| #49 | 4. | DETECTION FREQUENCY 406.0269 MHZ |
| #50 | 5. | COUNTRY OF BEACON REGISTRATION 232/G.BRITAIN |
| #51,52 | 6. | USER CLASS - MARITIME ID MMSI LAST SIX DIGITS 387718 |
| #53 | 7. | EMERGENCY CODE NIL |
| #54 | 8. | POSITIONS |
| #54a | | RESOLVED - NIL |
| #54b | | DOPPLER A - NIL |
| #54c | | DOPPLER B - NIL |
| #54d | | ENCODED - 50 24.0N 005 16.0W UPDATE TIME UNKNOWN |
| #55 | 9. | ENCODED POSITION PROVIDED BY EXTERNAL DEVICE |
| #56 | 10. | NEXT PASS TIMES |
| #56a | | RESOLVED - NIL |
| #56b | | DOPPLER A - NIL |
| #56c | | DOPPLER B - NIL |
| #56d | | ENCODED - NIL |
| #57 | 11. | HEX ID BEEE01D20001401 HOMING SIGNAL 121.5 MHZ |
| #58 | 12. | ACTIVATION TYPE - MANUAL |
| #59 | 13. | BEACON NUMBER ON AIRCRAFT OR VESSEL NO. 7 |
| #60 | 14. | OTHER ENCODED INFORMATION |
| | A. | BEACON MANUFACTURER AND MODEL NUMBER - LITTON/948 |
| #61 | 15. | OPERATIONAL INFORMATION |
| | A. | REGISTRATION INFORMATION AT UKMCC TELEX: 75194 UKMCC G AFTN: EGQPZSZX TELEPHONE: (44-1343) 836015 |
| | B. | RELIABILITY OF ENCODED POSITION DATA - GOOD |
| #62 | 16. | REMARKS - NIL |
| #63 | | END OF MESSAGE |

SAMPLE 406 MHz RESOLVED POSITION ALERT

(LEOSAR - with encoded position)

FROM AUMCC
TO RCC AUSTRALIA

1. DISTRESS COSPAS-SARSAT POSITION RESOLVED ALERT
 2. MSG NO. 17001 UKMCC REF 12345
 3. DETECTED AT 22 FEB 95 1915 UTC BY COSPAS 06
 4. DETECTION FREQUENCY 406.0269 MHZ
 5. COUNTRY OF BEACON REGISTRATION 232/G.BRITAIN
 6. USER CLASS - MARITIME ID MMSI LAST SIX DIGITS 387718
 7. EMERGENCY CODE - NIL
 8. POSITIONS
 - RESOLVED - 55 23.2N 022 29.9W
 - DOPPLER A - 55 19.1N 022 20.4W
 - DOPPLER B -
 - ENCODED - 55 23.2N 022 25.0W UPDATE TIME UNKNOWN
 9. ENCODED POSITION PROVIDED BY EXTERNAL DEVICE
 10. NEXT PASS TIMES
 - RESOLVED - 22 FEB 95 2130 UTC
 - DOPPLER A - NIL
 - DOPPLER B - NIL
 - ENCODED - NIL
 11. HEX ID BEEE01D20001401 HOMING SIGNAL 121.5 MHZ
 12. ACTIVATION TYPE - MANUAL
 13. BEACON NUMBER ON AIRCRAFT OR VESSEL NO. 7
 14. OTHER ENCODED INFORMATION
 - A. BEACON MANUFACTURER AND MODEL NUMBER - LITTON/948
 15. OPERATIONAL INFORMATION
 - A. REGISTRATION INFORMATION AT UKMCC
 - TELEX: 75194 UKMCCK G
 - AFTN: EGQPZSZX
 - TELEPHONE: (44-1343) 836015
 16. REMARKS - NIL
- END OF MESSAGE

SAMPLE 406 MHz CONTINUED TRANSMISSION ALERT

(LEOSAR - with encoded position)

FROM AUMCC
TO RCC AUSTRALIA

1. DISTRESS COSPAS-SARSAT POSITION RESOLVED UPDATE ALERT
 2. MSG NO. 17002 UKMCC REF 12345
 3. DETECTED AT 22 FEB 95 2130 UTC BY COSPAS 06
 4. DETECTION FREQUENCY 406.0269 MHZ
 5. COUNTRY OF BEACON REGISTRATION 232/G.BRITAIN
 6. USER CLASS - MARITIME ID MMSI LAST SIX DIGITS 387718
 7. EMERGENCY CODE - NIL
 8. POSITIONS
 - RESOLVED - 55 23.2N 022 29.9W
 - DOPPLER A - 55 19.1N 022 20.4W
 - DOPPLER B -
 - ENCODED - 55 23.2N 022 25.0W UPDATE TIME UNKNOWN
 9. ENCODED POSITION PROVIDED BY EXTERNAL DEVICE
 10. NEXT PASS TIMES
 - RESOLVED - 22 FEB 95 2201 UTC
 - DOPPLER A - NIL
 - DOPPLER B - NIL
 - ENCODED - NIL
 11. HEX ID BEEE01D20001401 HOMING SIGNAL 121.5 MHZ
 12. ACTIVATION TYPE - MANUAL
 13. BEACON NUMBER ON AIRCRAFT OR VESSEL NO. 7
 14. OTHER ENCODED INFORMATION
 - A. BEACON MANUFACTURER AND MODEL NUMBER - LITTON/948
 - B. ENCODED POSITION ACCURACY - 2 MINUTES
 15. OPERATIONAL INFORMATION
 - A. REGISTRATION INFORMATION AT UKMCC
 - TELEX: 75194 UKMCCK G
 - AFTN: EGQPZSZX
 - TELEPHONE: (44-1343) 836015
 16. REMARKS - NIL
- END OF MESSAGE

SAMPLE 406 MHz POSITION CONFLICT ALERT

(LEOSAR - without encoded position)

FROM AUMCC
TO RCC AUSTRALIA

1. DISTRESS COSPAS-SARSAT POSITION CONFLICT ALERT
 2. MSG NO. 17001 UKMCC REF 12345/12346
 3. DETECTED AT 22 FEB 95 1738 UTC BY SARSAT 02
 4. DETECTION FREQUENCY 406.0269 MHZ
 5. COUNTRY OF BEACON REGISTRATION 232/G.BRITAIN
 6. USER CLASS - MARITIME ID MMSI LAST SIX DIGITS 387718
 7. EMERGENCY CODE - NIL
 8. POSITIONS
 - RESOLVED - NIL
 - DOPPLER A - 56 16.1N 001 18.4W PROB 50
 - DOPPLER B - 54 47.9N 019 37.0W PROB 50
 - ENCODED - NIL UPDATE TIME NIL
 9. ENCODED POSITION PROVIDED BY: NIL
 10. NEXT PASS TIMES
 - RESOLVED - NIL
 - DOPPLER A - 22 FEB 95 1830 UTC
 - DOPPLER B - 22 FEB 95 1831 UTC
 - ENCODED - NIL
 11. HEX ID BEEE01D20001401 HOMING SIGNAL 121.5 MHZ
 12. ACTIVATION TYPE - MANUAL
 13. BEACON NUMBER ON AIRCRAFT OR VESSEL NO. 7
 14. OTHER ENCODED INFORMATION
 - A. BEACON MANUFACTURER AND MODEL NUMBER - LITTON/948
 15. OPERATIONAL INFORMATION
 - A. REGISTRATION INFORMATION AT UKMCC
 - TELEX: 75194 UKMCCK G
 - AFTN: EGQPZSZX
 - TELEPHONE: (44-1343) 836015
 - B. RELIABILITY OF DOPPLER POSITION DATA - SUSPECT
 16. REMARKS
 - THIS POSITION 200 KILOMETRES FROM PREVIOUS ALERT
- END OF MESSAGE

SAMPLE 406 MHz Notification of Country of beacon registration (NOCR) ALERT

(LEOSAR - encoded position)

FROM AUMCC
TO RCC AUSTRALIA

1. DISTRESS COSPAS-SARSAT NOTIFICATION OF COUNTRY OF BEACON REGISTRATION ALERT
 2. MSG NO. 16999 UKMCC REF 12345
 3. DETECTED AT 22 FEB 95 1708 UTC BY SARSAT 04
 4. DETECTION FREQUENCY 406.0269 MHZ
 5. COUNTRY OF BEACON REGISTRATION 232/G.BRITAIN
 6. USER CLASS - MARITIME ID MMSI LAST SIX DIGITS 387718
 7. EMERGENCY CODE - NIL
 8. POSITIONS
 - RESOLVED - NIL
 - DOPPLER A - NIL
 - DOPPLER B - NIL
 - ENCODED - 50 24.0N 005 16.0W UPDATE TIME UNKNOWN
 9. ENCODED POSITION PROVIDED BY EXTERNAL DEVICE
 10. NEXT PASS TIMES
 - RESOLVED - NIL
 - DOPPLER A - NIL
 - DOPPLER B - NIL
 - ENCODED - NIL
 11. HEX ID BEEE01D20001401 HOMING SIGNAL 121.5 MHZ
 12. ACTIVATION TYPE - MANUAL
 13. BEACON NUMBER ON AIRCRAFT OR VESSEL NO. 7
 14. OTHER ENCODED INFORMATION
 - A. BEACON MANUFACTURER AND MODEL NUMBER - LITTON/948
 15. OPERATIONAL INFORMATION
 - A. REGISTRATION INFORMATION AT UKMCC
 - TELEX: 75194 UKMCCK G
 - AFTN: EGQPZSZX
 - TELEPHONE: (44-1343) 836015
 - B. RELIABILITY OF ENCODED DATA - GOOD
 16. REMARKS - NIL
- END OF MESSAGE

SAMPLE 406 MHz INITIAL ALERT

(GEOSAR - without encoded position)

FROM AUMCC
TO RCC AUSTRALIA

1. DISTRESS COSPAS-SARSAT INITIAL ALERT
 2. MSG NO. 16998 UKMCC REF 12345
 3. DETECTED AT 22 FEB 95 1708 UTC BY GOES 08
 4. DETECTION FREQUENCY 406.0269 MHZ
 5. COUNTRY OF BEACON REGISTRATION 232/G.BRITAIN
 6. USER CLASS - MARITIME ID MMSI LAST SIX DIGITS 387718
 7. EMERGENCY CODE - NIL
 8. POSITIONS
 - RESOLVED - NIL
 - DOPPLER A - NIL
 - DOPPLER B - NIL
 - ENCODED - NIL
 9. ENCODED POSITION PROVIDED BY EXTERNAL DEVICE
 10. NEXT PASS TIMES
 - RESOLVED - NIL
 - DOPPLER A - NIL
 - DOPPLER B - NIL
 - ENCODED - NIL
 11. HEX ID BEEE01D20001401 HOMING SIGNAL 121.5 MHZ
 12. ACTIVATION TYPE - MANUAL
 13. BEACON NUMBER ON AIRCRAFT OR VESSEL NO. 7
 14. OTHER ENCODED INFORMATION
 - A. BEACON MANUFACTURER AND MODEL NUMBER - LITTON/948
 15. OPERATIONAL INFORMATION
 - A. REGISTRATION INFORMATION AT UKMCC
 - TELEX: 75194 UKMCCK G
 - AFTN: EGQPZSZX
 - TELEPHONE: (44-1343) 836015
 16. REMARKS - NIL
- END OF MESSAGE

SAMPLE 121.5 MHz INITIAL ALERT

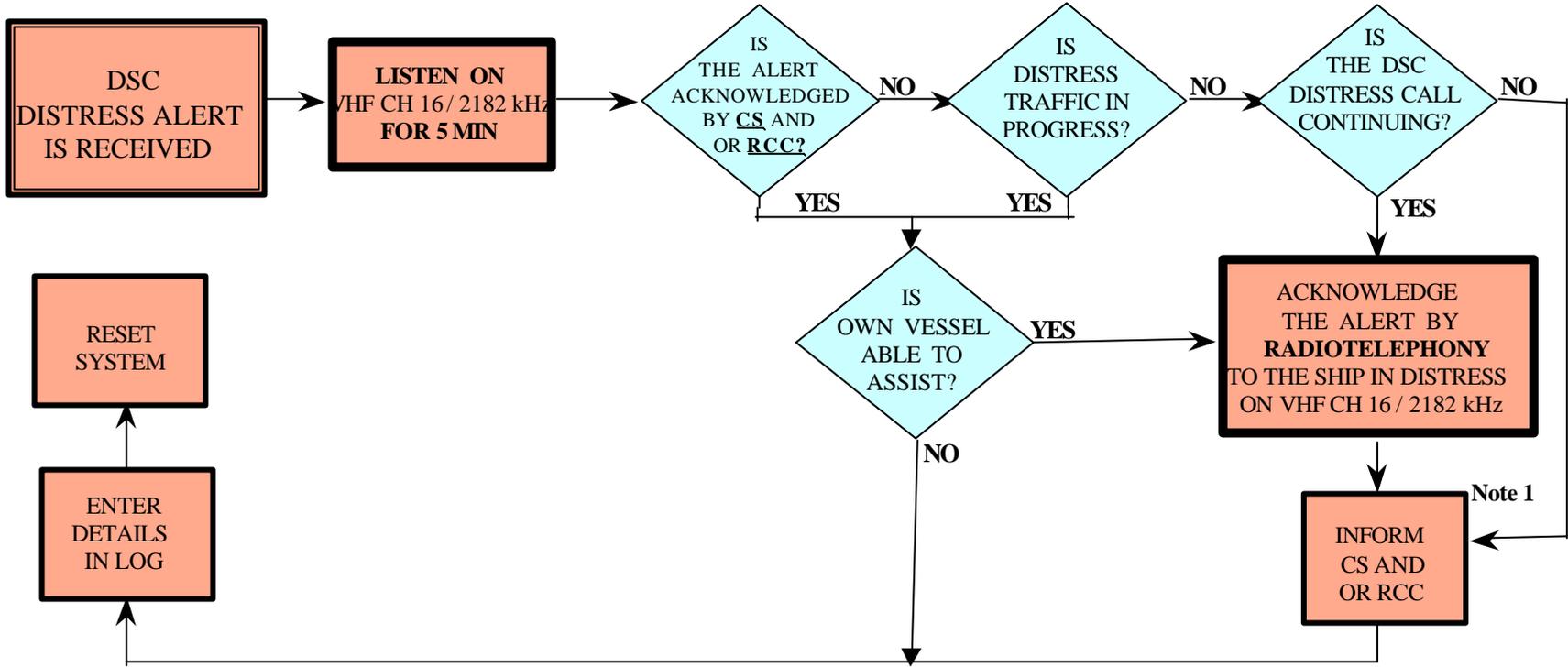
FROM AUMCC
TO RCC AUSTRALIA

1. DISTRESS COSPAS-SARSAT INITIAL ALERT
 2. MSG NO. 18001 UKMCC REF 40007/40008
 3. DETECTED AT 22 FEB 96 1738 UTC BY SARSAT 02
 4. DETECTION FREQUENCY 121.5678 MHz
 5. NIL
 6. NIL
 7. NIL
 8. POSITIONS
RESOLVED - NIL
DOPPLER A - 56 16.1N 001 18.4W PROB 50
DOPPLER B - 54 47.9N 019 37.0W PROB 50
ENCODED - NIL
 9. NIL
 10. NEXT PASS TIMES
RESOLVED - NIL
DOPPLER A - 22 FEB 96 1830 UTC
DOPPLER B - 22 FEB 96 1831 UTC
ENCODED - NIL
 11. NIL
 12. NIL
 13. NIL
 14. NIL
 15. OPERATIONAL INFORMATION
A. DOPPLER TECHNICAL QUALITY - FAIR
 16. REMARKS NIL
- END OF MESSAGE

SECTION 6
Volume III, section 2-Rendering Assistance
Replace diagrams on pages 2-3 with the following:

FLOW DIAGRAM 1

ACTIONS BY SHIPS UPON RECEPTION OF VHF / MF DSC DISTRESS ALERT



REMARKS:

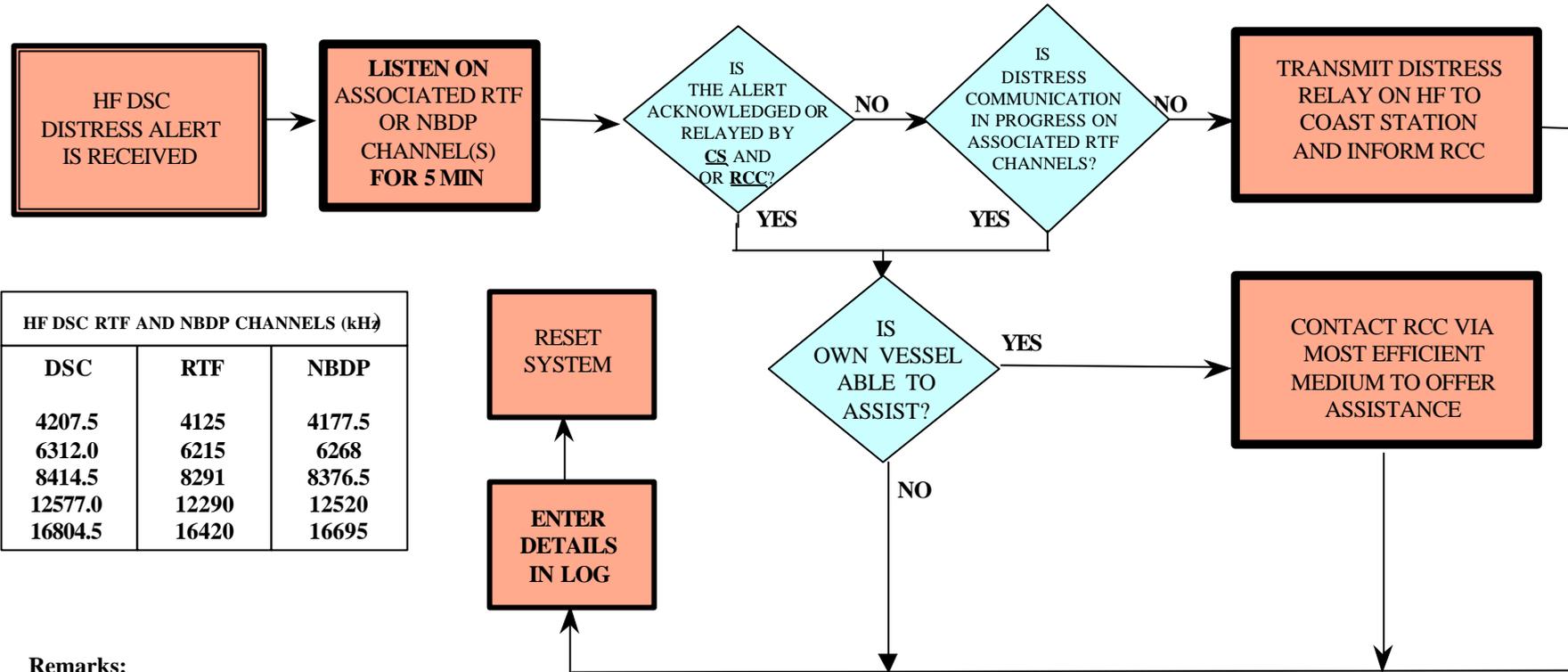
Note 1 : Appropriate or relevant RCC and/or Coast Station shall be informed accordingly. If further DSC alerts are received from the same source and the ship in distress is beyond doubt in the vicinity, a DSC acknowledgement may, after consultation with an RCC or Coast Station, be sent to terminate the call.

Note 2 : In no case is a ship permitted to transmit a DSC distress relay call on receipt of a DSC distress alert on either VHF channel 70 or MF channel 2187.5 kHz.

CS = Coast Station

RCC = Rescue Co-ordination Center

FLOW DIAGRAM 2
ACTIONS BY SHIPS UPON RECEPTION OF **HF DSC** DISTRESS ALERT



| HF DSC RTF AND NBDP CHANNELS (kHz) | | |
|------------------------------------|-------|--------|
| DSC | RTF | NBDP |
| 4207.5 | 4125 | 4177.5 |
| 6312.0 | 6215 | 6268 |
| 8414.5 | 8291 | 8376.5 |
| 12577.0 | 12290 | 12520 |
| 16804.5 | 16420 | 16695 |

Remarks:

- NOTE 1 : If it is clear the ship or persons in distress are not in the vicinity and/or other crafts are better placed to assist, superfluous communications which could interfere with search and rescue activities are to be avoided. Details should be recorded in the appropriate logbook.
- NOTE 2 : The ship should establish communications with the station controlling the distress as directed and render such assistance as required and appropriate.
- NOTE 3 : Distress relay calls should be initiated manually.

CS = Coast Station

RCC = Rescue Co-ordination Center

ANNEX 18

**REVISED WORK PROGRAMME OF THE SUB-COMMITTEE
AND PROPOSED PROVISIONAL AGENDA FOR COMSAR 7**

PROPOSED REVISED WORK PROGRAMME

Sub-Committee on Radiocommunications and Search and Rescue (COMSAR)

| | | Target completion date/number of sessions needed for completion | Reference |
|----|--|--|--------------------------------------|
| 1 | Global Maritime Distress and Safety System (GMDSS) | | COMSAR 6/22, section 3 |
| .1 | matters relating to the GMDSS Master Plan | Continuous | COMSAR 6/22, paragraphs 3.1 to 3.4 |
| .2 | replies to questionnaire on casualties | Continuous | COMSAR 1/30, paragraphs 3.15 to 3.16 |
| .3 | exemptions from radio requirements | Continuous | COMSAR 4/14, paragraphs 3.38 to 3.41 |
| 2 | Promulgation of maritime safety information (MSI) (in co-operation with ITU, IHO, WMO and IMSO) | | |
| .1 | operational and technical co-ordination provisions of Maritime Safety Information (MSI) services, including review of the related documents | Continuous | COMSAR 6/22, paragraphs 3.5 to 3.23 |

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- Notes:**
- 1 “H” means a high priority item and “L” means a low priority item. However, within the high and low priority groups, items have not been listed in any order of priority.
 - 2 Strike-out text indicates proposed deletions and shaded text shows proposed additions and changes.
 - 3 Items printed in bold letters have been selected for the provisional agenda for COMSAR 7.

Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) (continued)

| | | Target completion date/number of sessions needed for completion | Reference |
|---------------|---|--|---|
| 3 | ITU World Radiocommunication Conference matters | Continuous | COMSAR 6/22, paragraphs 5.8 to 5.17 |
| 4 | Radiocommunication ITU-R Study Group 8 matters | Continuous | COMSAR 6/22, paragraphs 5.1 to 5.7 |
| 5 | Satellite services (Inmarsat and COSPAS-SARSAT) | Continuous | COMSAR 6/22, section 6 |
| 6 | Matters concerning search and rescue, including those related to the 1979 SAR Conference and the introduction implementation of the GMDSS | | |
| .1 | harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters | 2002 2003 | COMSAR 4/14, paragraphs 8.1 to 8.19; COMSAR 6/22, paragraphs 8.1 to 8.13 |
| .2 | plan for the provision of maritime SAR services, including procedures for routing distress information in the GMDSS | Continuous | COMSAR 6/22, paragraphs 8.14 to 8.44 |
| .3 | revision of the IAMSAR Manual | Continuous | MSC 71/23, paragraph 20.2; COMSAR 6/22, section 15 |
| .4 | development of a list of contents for a medical first aid kit for certain ro-ro passenger ships for utilization by a medical doctor | 2002 | COMSAR 5/14, paragraph 14.2.4; MSC 74/24, paragraph 21.25.4 |
| .4 | medical assistance in SAR services | 2003 | COMSAR 6/22, paragraph 19.6.3.1 |

Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) (continued)

| | | Target completion date/number of sessions needed for completion | Reference |
|--------------------------|---|--|--|
| <u>7</u> <u>H.8</u> | Emergency radiocommunications, including false alerts and interference | 2002 2003 | COMSAR 6/22, paragraph 7.8 |
| <u>8</u> <u>7</u> | Casualty analysis (co-ordinated by FSI) | Continuous | MSC 70/23, paragraphs 9.17 and 20.4 |
| H.1 | Procedures for responding to DSC alerts | 2003 | COMSAR 4/14, paragraph 3.49; MSC 72/23, paragraph 21.32; COMSAR 6/22, paragraph 3.24 to 3.28 |
| H.2 | Development of criteria for general radiocommunications | 2002 | MSC 69/22, paragraph 20.36; COMSAR 5/14, section 4 |
| <u>H.3</u> <u>H.2</u> | Amendments to SOLAS chapter IV pursuant to the criteria set out in resolution A.888(21) | 3 sessions | MSC 72/23, paragraph 21.33.1.2 |
| <u>H.4</u> <u>H.3</u> | Development of a procedure for recognition of mobile-satellite systems | 2003 | MSC 72/23, paragraph 21.33.1.3; COMSAR 6/22, section 16 |
| <u>H.5</u> <u>H.4</u> | Developments in maritime radiocommunication systems and technology | 2003 | MSC 74/24, paragraph 21.25.1; COMSAR 6/22, section 14 |
| <u>H.6</u> <u>H.5</u> | Bridge-to-bridge radiocommunications | 2003 | MSC 74/24, paragraph 21.25.2; COMSAR 6/22, paragraphs 9.1 to 9.3 and 9.7 |

Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) (continued)

| | | Target completion date/number of sessions needed for completion | Reference |
|-----------------------|--|--|---|
| H.7 | Places of refuge (co-ordinated by NAV) | 2002 | COMSAR 5/14, paragraph 8.88; MSC 74/24, paragraphs 21.25.3 and 21.31 |
| H.8 H.6 | Large passenger ship safety | 2003 | MSC 74/24, paragraph 21.4; COMSAR 6/22, section 11 |
| H.9 | Revision of the fishing vessel Safety Code and Voluntary Guidelines (co-ordinated by SLF) | 2003 | MSC 74/24, paragraph 21.5 |
| H.10 | Matters related to bulk carrier safety | 2002 | MSC 74/24, paragraph 21.6 |
| L.1 | Harmonization of GMDSS requirements for radio installations on board SOLAS ships | 2002 2003 | MSC 71/23, paragraph 20.23; COMSAR 6/22, paragraph 18.2 |
| L.2 H.7 | Revision of the performance standards for NAVTEX equipment | 2003 | MSC 74/24, paragraph 21.26 COMSAR 6/22, section 17 |

PROPOSED PROVISIONAL AGENDA FOR COMSAR 7*

- Opening of the session
- 1 Adoption of the agenda
- 2 Decisions of other IMO bodies
- 3 Global Maritime Distress and Safety System (GMDSS)
 - .1 matters relating to the GMDSS Master Plan
 - .2 operational and technical co-ordination provisions of Maritime Safety Information (MSI) services, including review of the related documents
 - .3 procedures for responding to DSC alerts
- 4 ITU maritime radiocommunication matters
 - .1 Radiocommunication ITU-R Study Group 8
 - .2 ITU World Radiocommunication Conference matters
- 5 Satellite services (Inmarsat and COSPAS-SARSAT)
- 6 Emergency radiocommunications, including false alerts and interference
- 7 Matters concerning search and rescue, including those related to the 1979 SAR Conference and the implementation of the GMDSS
 - .1 harmonization of aeronautical and maritime search and rescue procedures, including SAR training matters
 - .2 plan for the provision of maritime SAR services, including procedures for routing distress information in the GMDSS
 - .3 medical assistance in SAR services
- 8 Bridge-to-bridge radiocommunications
- 9 Large passenger ship safety
- 10 Developments in maritime radiocommunication systems and technology
- 11 Revision of the IAMSAR Manual
- 12 Development of a procedure for recognition of mobile-satellite systems

* Agenda item numbers do not necessarily indicate priority.

- 13 Revision of performance standards for NAVTEX equipment
 - 14 Harmonization of GMDSS requirements for radio installations on board SOLAS ships
 - 15 Work programme and agenda for COMSAR 8
 - 16 Election of Chairman and Vice-Chairman for 2004
 - 17 Any other business
 - 18 Report to the Maritime Safety Committee
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